

**NUCLEAR DATA AND MEASUREMENTS SERIES**

**ANL/NDM-30**

**Analysis of the Sensitivity of Spectrum-Average Cross Sections  
to Individual Characteristics of Differential Excitation Functions**

by

Donald L. Smith

March 1977

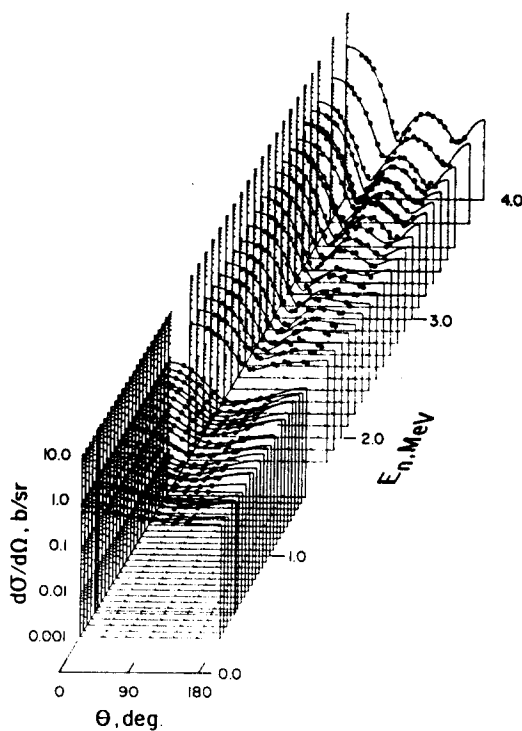
**ARGONNE NATIONAL LABORATORY,  
ARGONNE, ILLINOIS 60439, U.S.A.**

# NUCLEAR DATA AND MEASUREMENTS SERIES

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## ANALYSIS OF THE SENSITIVITY OF SPECTRUM-AVERAGE CROSS SECTIONS TO INDIVIDUAL CHARACTERISTICS OF DIFFERENTIAL EXCITATION FUNCTIONS

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In January 1975, the research and development functions of the former U.S. Atomic Energy Commission were incorporated into those of the U.S. Energy Research and Development Administration.

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## NUCLEAR DATA AND MEASUREMENTS SERIES

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## PREFACE

This report contains material which was prepared for presentation at a meeting of the ENDF/B Dosimetry File Task Force held at the National Bureau of Standards, Gaithersburg, Maryland, during the period March 25-31, 1977.

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ANALYSIS OF THE SENSITIVITY OF  
SPECTRUM-AVERAGE CROSS SECTIONS  
TO INDIVIDUAL CHARACTERISTICS OF  
DIFFERENTIAL EXCITATION FUNCTIONS \*

by

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ABSTRACT

A simple procedure for analyzing the sensitivity of computed spectrum-average cross sections to detailed properties of excitation functions for threshold nuclear reactions commonly used in reactor dosimetry is described. The approach is based upon consideration of two energy-dependent functions  $F$  and  $G$  defined by the formulas

$$F(E) = \int_0^E \sigma(\epsilon) \phi(\epsilon) d\epsilon$$

$$\text{and } G(E) = \int_0^E \sigma'(\epsilon) \phi(\epsilon) d\epsilon,$$

where  $\sigma$  is the differential excitation function,  $\sigma'$  is its first derivative with respect to energy, and  $\phi$  is the neutron spectrum used in computing the spectrum-average cross section  $\langle \sigma \rangle$ . This procedure is shown to be useful in identifying specific needs for improved differential data and as a tool to be employed in performing evaluations. Several examples are presented to illustrate the subject matter.

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## I. INTRODUCTION

The development of accurate, reliable reactor dosimetry techniques ranks high among the priorities of reactor research programs in several countries including the U.S.A. The implications are profound since they encompass major issues such as safety (monitoring the structural integrity of containment vessels and key components of heat transfer systems) and economics (fuel cycle management). There are three essential ingredients required in order to develop reactor dosimetry technology to the level of maturity required for the routine demands associated with application in the electric power industry:

- i. Accurate, reliable and relatively simple procedures are required for the measurement of reaction rates experienced by dosimetry monitors during routine operation of power reactors.
- ii. The microscopic differential cross sections for a basic set of dosimetry monitor reactions need to be known with a precision adequate to satisfy the requirements for this application. Taken together, these reactions must encompass a wide range of spectral sensitivities (from thermal energies to many MeV).
- iii. Efficient and mathematically rigorous numerical procedures are needed in order to unfold reactor spectra and deduce neutron doses from the observed reaction rates for the monitors.

Items (i) and (iii) appear to present no real difficulties; however, limitations in the cross section data base are primarily responsible for impeding progress in the development of reactor dosimetry technology.

Granted that the establishment of an accurate data base of microscopic differential cross sections is crucially important for future development of the technology, it is worthwhile to examine what steps are to be taken in order to achieve this objective. It seems clear, in general terms, that progress will come from a combination of improved differential measurements and careful evaluation of existing data using consistent cross section standards and accurate supplementary non-neutron data (e.g. decay properties). The microscopic neutron cross sections are fundamental quantities and knowledge of these parameters may be required in the future for other technologies (e.g. medical applications). Therefore, it is suggested that development of an accurate data base for these cross sections should not be unduly influenced by expediencies having their origin in the desire to satisfy certain requirements of reactor technology. More specifically, cross section values should not be adjusted in order to obtain convenient consistency in the limited context of current reactor applications, with no regard to the possible implications for other technologies.

Of course, it is understandable why it has been tempting for scientists who have borne the responsibility for developing a viable dosimetry technology to resort to expedient solutions to bypass difficulties which were encountered as a result of the poor quality

of the available differential data. Fortunately, the situation has improved considerably in the last several years, owing to availability of new differential data which has emerged from research programs in several countries. It now appears possible to progress toward achievement of the goals of dosimetry technology without resorting to questionable scientific procedures.

Within limits consistent with this admonition, it is reasonable to employ benchmark fields as tools in the process of developing a differential cross section data base which is adequate for dosimetry applications. The benchmark facilities should be characterized by a high degree of reproducibility, well-known spectral properties, and structural simplicity to facilitate the interpretation of experimental results by means of computations. Furthermore, it is desirable to have some benchmark fields with spectra resembling those of power reactors. Reaction rate measurements in benchmark fields can serve to check on the consistency of currently recommended differential data sets. This can be very useful for pointing out apparent problem areas. However, the results of reaction rate measurements in benchmark fields should not be used to renormalize or otherwise adjust differential data, for to do this would be tantamount to an acceptance of the reaction rates, or equivalently, the spectrum-average cross sections, as fundamental quantities. Discrepancies in benchmark field reaction rate measurements (assuming that the fields are correctly characterized) can serve to identify needs for additional monoenergetic measurements designed to yield improved accuracy for the relevant

differential cross sections. It is incorrect to assume that real progress can be made in development of dosimetry technology by simply adjusting the differential cross sections without the guidance offered by new experimental microscopic data.

The objective of this report is the description of a simple formalism which is useful in analysis of the sensitivity of integral reaction rates to the details of differential cross section data. The purpose of performing such analyses is to decide how to best concentrate the expenditure of funds and manpower in the measurement of differential cross sections in order to establish a data base which is sufficiently accurate for dosimetry applications.

The mathematical formalism is presented in Section II. Some examples which illustrate the application of the method are presented in Section III. Emphasis is placed on threshold dosimetry reactions rather than reaction processes which are sensitive to low-energy neutrons, however the approach need not be limited to this category of monitors.

## II. FORMALISM

The reaction rate for a dosimetry monitor in an integral field  $\phi$  is related to the spectrum-average cross section  $\langle\sigma\rangle$  defined by the formula

$$\langle\sigma\rangle = \int_0^{\infty} \sigma(\epsilon) \phi(\epsilon) d\epsilon, \quad (1)$$

with the constraint of normalization

$$\int_0^{\infty} \phi(\epsilon) d\epsilon = 1 \quad (2)$$

required for the function  $\phi$  .

Let us define a function

$$F(E) = \int_0^E \sigma(\epsilon) \phi(\epsilon) d\epsilon , \quad (3)$$

which is related to the spectrum-average cross section by the expression

$$\langle \sigma \rangle = F(\infty) . \quad (4)$$

The function  $F$  is useful because it provides a means for examining the contribution to the spectrum-average cross section which comes from specific energy intervals. For example, the fractional contribution  $f(E_1, E_2)$  to the spectrum average, corresponding to the energy interval  $(E_1, E_2)$ , is given by the formula

$$f(E_1, E_2) = [F(E_2) - F(E_1)] / \langle \sigma \rangle \quad (5)$$

It has been decided that a practical cutoff for the energy integrations of Eqs. (1) and (2) is 20 MeV and this has been selected as the upper limit for the ENDF/B-IV Dosimetry File [1]. Thus,

$$\langle \sigma \rangle \approx F(20 \text{ MeV}) \quad (6)$$

is assumed for most cross sections and spectra of interest for current dosimetry applications.

Eq.(5) is the starting point for the present sensitivity analysis.

Let

$P_{\sigma}$  = an assumed percentage change in the normalization of  $\sigma$  in the interval  $(E_1, E_2)$  ,

$P_N$  = the percentage change in the computed  $\langle \sigma \rangle$  resulting from this change in  $\sigma$  within the interval  $(E_1, E_2)$  ,

then

$$P_N = P_\sigma f(E_1, E_2) , \quad (7)$$

with  $f$  computed using Eqs.(3) and (5).

Normalization considerations are not the only ones which may be encountered in the development of accurate differential cross sections for applications. There is also the matter of energy scale definition. Differential cross sections are measured using monoenergetic techniques and it is well known that uncertainties exist in the determination of energy scales.

Assume that the function  $S$  represents an assumed excitation function which is related to the  $\sigma$  by the expression

$$S(E) = \sigma [E + \delta(E)] \quad (8)$$

where  $\delta$  represents a small energy-dependent shift of the neutron-energy scale. The magnitude of  $\delta$  generally increases with energy, but only gradually. The ratio  $\delta/E$  is a small quantity so it is reasonable to consider using a Taylor series expansion to approximate Eq.(8):

$$S(E) \sim \sigma(E) + \delta(E) \sigma'(E) + \frac{1}{2} \delta^2(E) \sigma''(E) \quad (9)$$

where  $\sigma'$  and  $\sigma''$  are first and second derivatives of  $\sigma$  respectively.

The relative importance of the individual terms in this expansion can be examined by means of a numerical example which is representative of typical applications for this formalism.

The greatest sensitivity to energy scale definition for threshold reactions is in the threshold region. A reasonable approximation

to threshold behavior of an excitation function is

$$\sigma(E) \sim a \exp(bE), \quad (10)$$

so that

$$\sigma'(E) \sim b \sigma, \quad (11)$$

$$\sigma''(E) \sim b^2 \sigma. \quad (12)$$

For this model, the ratio of the first-order to zeroth order terms is

$$\rho_1 = b \delta(E), \quad (13)$$

and the ratio of the second-order to zeroth order terms is

$$\rho_2 = \frac{1}{2} b^2 \delta^2(E). \quad (14)$$

Typically,  $b \sim 2.3$  which corresponds to an order-of-magnitude increase in  $\sigma$  for an energy increase of  $\sim 1$  MeV in the threshold region. An uncertainty in the energy,  $\delta$ , of  $\sim 0.01$  to  $0.02$  MeV is quite possible for a reaction with a threshold in the vicinity of a few MeV. Consequently,  $\rho_1 \sim 0.02$  to  $0.05$  and  $\rho_2 \sim 0.0003$  to  $0.001$ . So, it is entirely reasonable to neglect the second- and higher-order terms of the Taylor series expansion.

The relationship between the assumed excitation function  $S$  and the true cross section  $\sigma$  is well approximated by the formula

$$S(E) = \sigma(E) + \delta(E)\sigma'(E). \quad (15)$$

In terms of the spectrum average, defined as in Eq.(1), we have

$$\langle S \rangle = \langle \sigma \rangle + \langle \delta \sigma' \rangle. \quad (16)$$

Let us define a function  $G$  as follows:

$$G(E) = \int_0^E \sigma'(\epsilon) \phi(\epsilon) d\epsilon. \quad (17)$$

The effect of an energy scale shift in the interval  $(E_1, E_2)$  will be shown to be related to the function  $g$  defined by

$$g(E_1, E_2) = [G(E_2) - G(E_1)] / \langle \sigma \rangle . \quad (18)$$

It happens that the function  $\delta$  varies so gradually with energy that it can be approximated by a constant  $\bar{\delta}$  in a typical interval  $(E_1, E_2)$ . Let

$P_E$  = the percentage change in the computed  $\langle \sigma \rangle$  resulting from energy scale uncertainty, defined by the function  $\delta$ , in the interval  $(E_1, E_2)$ ,

then

$$P_E = \frac{100}{\langle \sigma \rangle} \int_{E_1}^{E_2} \delta(\epsilon) \sigma^1(\epsilon) \phi(\epsilon) d\epsilon$$

$$\approx 100 \bar{\delta} g(E_1, E_2) . \quad (19)$$

It follows from the preceding formalism that what is needed for routine sensitivity analyses are tables of the functions  $F$  and  $G$  vs. energy. These tables can be computed using evaluated cross sections (e.g. ENDF/B-IV [1]). Tabular information, prepared for several benchmark fields, can be used in planning future measurements aimed at improving the data base, or in clearly defining the implications of proposed changes in differential cross sections including segment re-normalization and energy scale adjustments.

### III. APPLICATION OF THE METHOD TO SELECTED EXAMPLES

Various benchmark fields have been employed in the testing and validation of differential data sets for dosimetry applications [2].



It is not practical to examine all these possibilities in the present work. The formalism of Section II is quite simple, so the interested reader can readily generate the tabular information needed to apply the method for any specific cases desired.

One neutron field which is universally accepted as a standard is the neutron spectrum resulting from thermal-neutron induced fission of  $^{235}\text{U}$ . The energy range from 0.25 to 8 MeV is an important one for threshold dosimetry reactions, and this spectrum can be represented to within  $\leq 2\%$  by the Maxwellian function

$$\phi(E) = C E^{\frac{1}{2}} \exp(-1.5 E/E_{av}) , \quad (20)$$

with  $E_{av} = 1.97$  MeV, in this energy range [3]. A collection of 22 threshold reactions from the ENDF/B-IV Dosimetry File [1] has been investigated using this standard spectrum. Relevant graphical and tabular information appear in the Appendix. Graphs of  $\sigma \phi$  are useful because they indicate the energy regions for which normalization considerations are important. Likewise, plots of  $\sigma' \phi$  point out energy regions for which energy scale definition is crucial. The examples given below are used to illustrate the method of analysis developed in this work. These examples make use of some, but by no means all, of the material in the Appendix.

Group structure formalism has not been used in the present work. Integrals of the form

$$\zeta = \int_0^E I(\epsilon) d\epsilon \quad (21)$$

are approximated by the finite sum

$$\zeta \approx \sum_{i=1}^n I(\epsilon_i) \Delta\epsilon \quad (22)$$

with  $\Delta\epsilon = 0.001$  MeV,  $\epsilon_1 = (0.001)i$  and  $n$  is such that  $E \approx (0.001)n$ .

Interpolation laws specified in the ENDF/B-IV Dosimetry File [1] have been utilized in calculating  $\sigma(\epsilon_i)$ . The derivative  $\sigma'(\epsilon_i)$  is approximated by the expression

$$\sigma'(\epsilon_i) \approx \frac{1}{\Delta\epsilon} [\sigma(\epsilon_{i+1}) - \sigma(\epsilon_i)] . \quad (23)$$

#### The $^{56}\text{Fe}(n;p)^{56}\text{Mn}$ Reaction

This reaction has been designated as a Primary or Category I reaction because of the good agreement which has been observed between the results of integral measurements in benchmark fields and spectrum-average calculations based on ENDF/B-IV differential cross sections. To be considered for inclusion in Category I, consistency of the order of 3-5% is required for benchmark test results.

This reaction has a broad threshold region and it is apparent from the appropriate plot in the Appendix that the spectrum-average cross section is sensitive to the definition of the energy scale over the range 4-11 MeV. An uncertainty  $\bar{\delta} \approx 0.03$  MeV for the energy scale in this region is a very likely possibility for this reaction. Utilizing the appropriate G values from the Appendix and Eq.(19), it is found that the computed  $\langle \sigma \rangle$  for  $^{235}\text{U}$  fission could be in error by  $\approx 2\%$  as a result of this effect alone. This is not a large error, but it seems that it may be a matter of luck that the ENDF/B-IV evaluation for this reaction yields benchmark consistency of Category I caliber.

#### The $^{238}\text{U}(n;f)$ Reaction

At a recent Specialists Meeting on fast-neutron fission for isotopes of uranium and plutonium [4], a controversy arose concerning

definition of the energy scale for  $^{238}\text{U}$  fission in the vicinity of threshold. The possibility of an uncertainty  $\bar{\delta} \sim 0.02$  MeV was raised. How significant is this from the point of view of dosimetry applications? It is clear from the appropriate graph of  $\sigma' \phi$  in the Appendix that the energy interval 1-2 MeV is the only one of any importance for this consideration. A calculation based on Eq.(19) and values of G in the Appendix yields an uncertainty of  $\sim 1\%$  in  $\langle \sigma \rangle$  for a  $^{235}\text{U}$  fission spectrum. This error is not large enough to produce any significant problems.

#### The $^{115}\text{In}(n;n')^{115\text{m}}\text{In}$ Reaction

An evaluation of this reaction has recently been undertaken for the ENDF/B-V Dosimetry File [5]. This new evaluation is based entirely on differential data (as it should be) and there are some obvious differences between this evaluation and the corresponding ENDF/B-IV evaluation [1]. The calculated spectrum-average cross section for  $^{235}\text{U}$  fission neutrons differ by  $\sim 13\%$  for these two evaluations. The spectrum-average cross section calculated using the recent evaluation appears to be in good agreement with the currently accepted integral value [6].

Which differences in these evaluations are significant from the point of view of the spectrum-average cross section? Energy scale definition is only significant for the energy range 0.5 - 2 MeV. Allowing for an uncertainty  $\bar{\delta} \sim 0.01$  MeV at these energies, it is found that an uncertainty of  $\sim 0.5\%$  is introduced into the computation of the spectrum-average cross section. This is negligible,

so one turns to consideration of normalization effects. From Figs. 2 and 3 of Ref. 5, it is seen that the most obvious differences between the two evaluations for the  $^{115}\text{In}(n;n')^{115\text{m}}\text{In}$  reaction are found in the energy regions 0.5 - 0.6 MeV, 0.7 - 1.0 MeV, 2 - 4 MeV and 5 - 7 MeV. Using the analysis described in this report, it is seen that the  $\sim 10\%$  difference in the region 2 - 4 MeV is by far the most significant insofar as the spectrum-average cross section is concerned. The results of two recent differential measurements [7,8] agree very well in this important region. The new evaluation [5] relies heavily on these consistent data sets in this region. This may explain why the spectrum-average cross section computed using the new evaluation agrees with the measured integral value.

#### The $^{46}\text{Ti}(n;p)^{46}\text{Sc}$ Reaction

Although the threshold for this reaction is 1.62 MeV, there are no monoenergetic data upon which to base an evaluation in the threshold region below  $\sim 3.7$  MeV. In a recent evaluation, it was necessary to determine the shape of the differential cross section in this region by means of statistical model calculations [9]. How important is this energy region from the point of view of dosimetry applications? What priority should be given to performing differential measurements at these energies? The table of F values for the  $^{46}\text{Ti}(n,p)^{46}\text{Sc}$  reaction, which is contained in the Appendix, can be used to readily show that  $\sim 11\%$  of the contribution to  $\langle \sigma \rangle$  for a  $^{235}\text{U}$  fission spectrum comes from energies  $< 3.7$  MeV. The differential

cross section estimated from model calculations could be in error by as much as 20% in this region which would lead to an error of  $\sim 2\%$  in computation of the  $^{235}\text{U}$  spectrum-average cross section and significantly larger errors for softer spectra characteristic of a power reactor. Measurements for at least a few energies below 3.7 MeV are needed in order to verify the excitation function derived from model calculations.

#### The $^{47}\text{Ti}(n;p)^{47}\text{Sc}$ Reaction

A feature of both the ENDF/B-IV [1] evaluation and a recent evaluation by Philis et al. [9] is the presence of a cusp in the excitation function between 2.2 and 2.6 MeV. Just how large an effect does this cusp have on the  $^{235}\text{U}$  spectrum-average cross section for this reaction? Elimination of the cusp would be equivalent to lowering the cross section by  $\sim 15\%$  in this range. From Eq.(7) and tabular information in the Appendix, it can be shown that the effect of removing the cusp is a reduction of the spectrum-average cross section by  $< 2\%$ . The presence of the cusp appears to be substantiated by the existing experimental data; however, the significance of its presence is modest from the point of view of dosimetry applications.

There are many other examples of the application of this method of analysis which could be included in this report; however, the objective of this report is to describe the method rather than to exhaustively survey the current status of differential dosimetry data.

#### ACKNOWLEDGEMENT

The author is grateful to J. W. Meadows and A. B. Smith for their valuable comments on the subject matter.

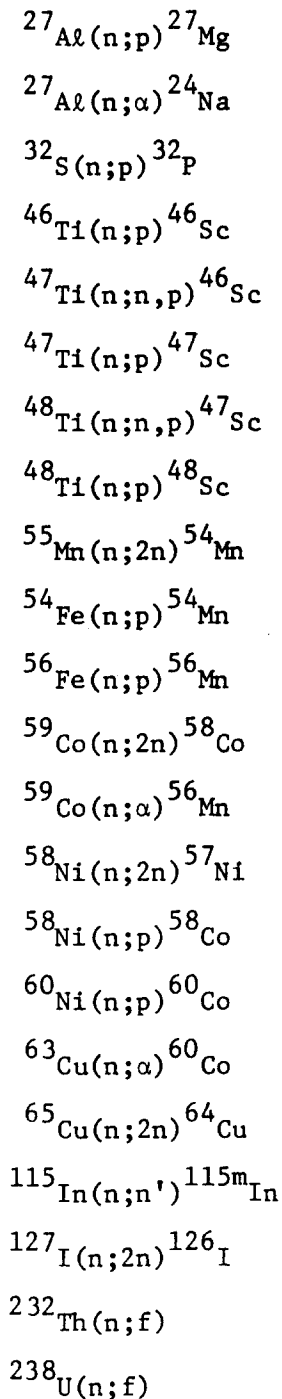
# REFERENCES

1. "ENDF/B-IV Dosimetry File," ed. B. A. Magurno, BNL-NCS-50446, National Nuclear Data Center, Brookhaven National Laboratory (1975).
2. W. N. McElroy and L. S. Kellogg, Nuclear Technology 25, 180 (1975).
3. J. A. Grundl and C. M. Eisenhauer, "Fission Spectrum Neutrons for Cross Section Validation and Neutron Flux Transfer," Proceedings of a Conference on Nuclear Cross Sections and Technology, Vol. I, National Bureau of Standards, Washington, D. C., March 3-7, 1975, NBS Special Publication 425, October 1975, p. 250.
4. "Proceedings of the NEANDC/NEACRP Specialists Meeting on Fast Neutron Fission Cross Sections of U-233, U-235, U-238 and Pu-239," Argonne National Laboratory, June 28-30, 1976, edited by W. P. Poenitz and A. B. Smith, ANL-76-90 (1976).
5. Donald L. Smith, "Evaluation of the  $^{115}\text{In}(n;n')^{115\text{m}}\text{In}$  Reaction for the ENDF/B-V Dosimetry File," ANL/NDM-26 (1976).
6. A. Fabry, H. Ceulemans, P. Vandeplas, W. N. McElroy and E. P. Lippincott, "Reactor Dosimetry Integral Reaction Rate Data in LMFBR Benchmark and Standard Neutron Fields: Status, Accuracy and Implications," Report prepared for the First AS7M-Euratom Symposium on Reactor Dosimetry, Petten, The Netherlands, September 22-26, 1975.
7. D. C. Santry and J. P. Butler, Can. J. Phys. 54, 757 (1975).
8. D. L. Smith and J. W. Meadows, ANL/NDM-14, Argonne National Laboratory (1975); see also Nucl. Sci. Eng. 60, 319 (1976).
9. C. Philis, O. Bersillon, D. Smith and A. Smith, "Evaluated (n;p) Cross Sections of  $^{46}\text{Ti}$ ,  $^{47}\text{Ti}$  and  $^{48}\text{Ti}$ ," ANL/NDM-27 (1977).

## APPENDIX

### GRAPHICAL AND TABULAR INFORMATION CORRESPONDING TO THE RESPONSE OF SEVERAL THRESHOLD REACTIONS TO A $^{235}\text{U}$ THERMAL-NEUTRON FISSION SPECTRUM

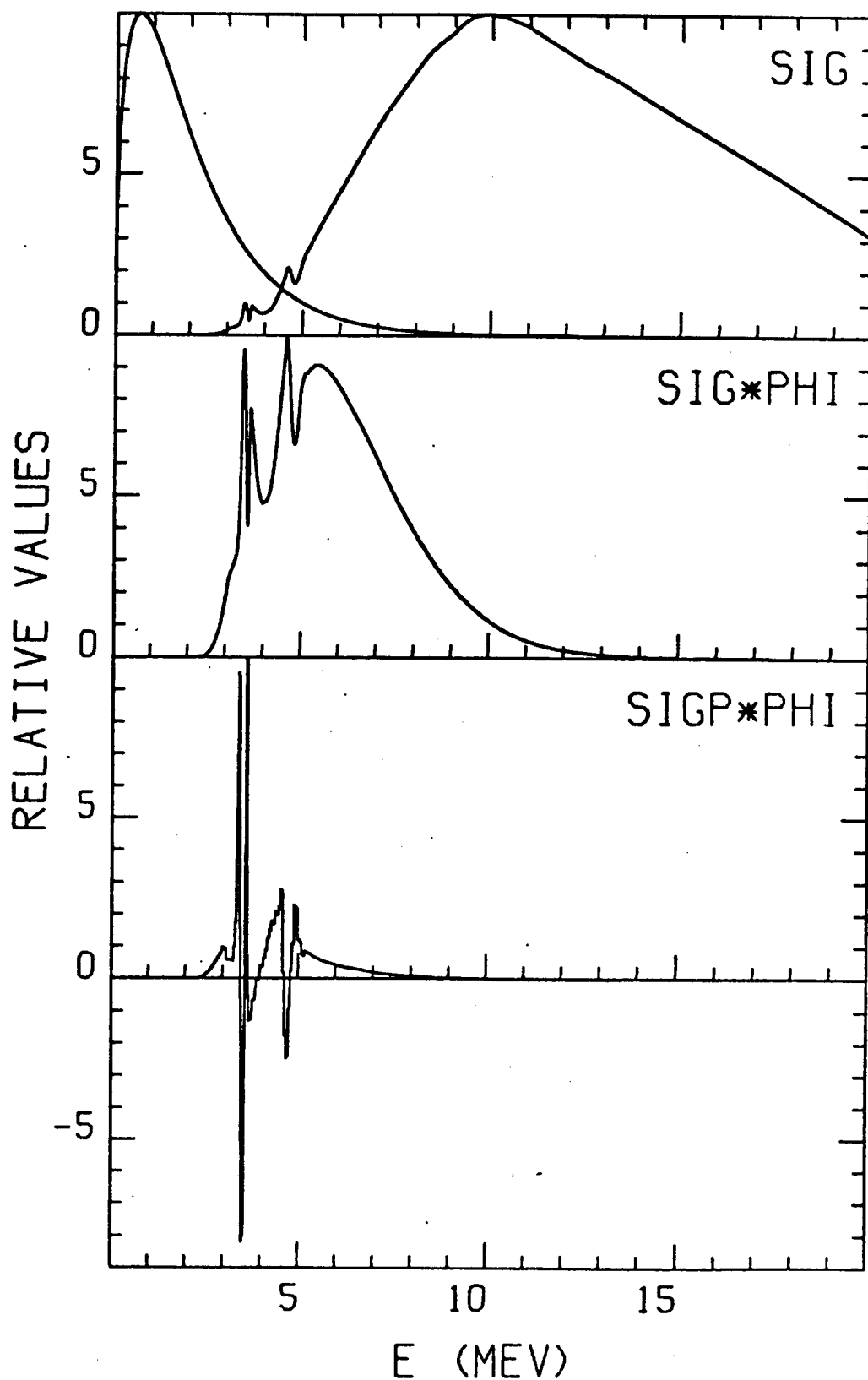
Calculations were performed for the following threshold reactions using values from the ENDF/B-IV Dosimetry File [1]:





A 0.1-MeV interval was selected for the tables, and values of  $\sigma$  (SIG),  $\sigma'$  (SIGP),  $\phi$  (PHI),  $\sigma \phi$  (SIG\*PHI), F,  $\sigma'\phi$  (SIGP\*PHI), and G vs. energy E are provided. Plots of  $\sigma$ ,  $\phi$  (shown with  $\sigma$  but not labelled),  $\sigma\phi$  and  $\sigma'\phi$  are included, along with the tabular information, for each reaction. Discontinuities in the  $\sigma'\phi$  plots result from shortcomings in the evaluated  $\sigma$  curves and in the interpolation laws utilized in the computations.

AL-27 (N, P) MG-27  
U-235 FISSION SPECTRUM



AL-27(N,P)MG-27  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1900E 01	.3412E-15	.8749E-13	.2432E-03	.8298E-19	.2044E-18	.2128E-16	.1044E-15
.2000E 01	.9090E-14	.4343E-10	.2312E-03	.2102E-17	.1122E-15	.1004E-13	.1220E-13
.2100E 01	.5230E-09	.3151E-07	.2196E-03	.1148E-12	.1119E-11	.6919E-11	.1223E-09
.2200E 01	.6600E-07	.2160E-05	.2063E-03	.1375E-10	.3511E-09	.4498E-09	.1438E-07
.2300E 01	.1150E-05	.2465E-04	.1973E-03	.2269E-09	.8691E-08	.4863E-08	.2365E-06
.2400E 01	.8000E-05	.1224E-03	.1865E-03	.1494E-08	.7949E-07	.2286E-07	.1561E-05
.2500E 01	.3280E-04	.3801E-03	.1767E-03	.5795E-08	.4073E-06	.6715E-07	.6089E-05
.2600E 01	.9690E-04	.8144E-03	.1670E-03	.1618E-07	.1441E-05	.1477E-06	.1714E-04
.2700E 01	.2290E-03	.1679E-02	.1577E-03	.3611E-07	.3964E-05	.2648E-06	.3863E-04
.2800E 01	.4590E-03	.2781E-02	.1463E-03	.6829E-07	.9074E-05	.4137E-06	.7393E-04
.2900E 01	.8180E-03	.4154E-02	.1402E-03	.1148E-06	.1811E-04	.5829E-06	.1259E-03
.3000E 01	.1330E-02	.5949E-02	.1323E-03	.1759E-06	.3253E-04	.7868E-06	.1957E-03
.3100E 01	.2010E-02	.4500E-02	.1246E-03	.2504E-06	.5392E-04	.5606E-06	.2828E-03
.3200E 01	.2460E-02	.4730E-02	.1173E-03	.2886E-06	.8093E-04	.5513E-06	.3372E-03
.3300E 01	.2930E-02	.8273E-02	.1104E-03	.3234E-06	.1116E-03	.9132E-06	.3911E-03
.3400E 01	.5100E-02	.6180E-01	.1038E-03	.5295E-06	.1506E-03	.6417E-05	.6266E-03
.3500E 01	.1010E-01	.1600E-01	.9762E-04	.9860E-06	.2343E-03	.1562E-05	.1127E-02
.3600E 01	.4600E-02	.3780E-01	.9175E-04	.4220E-06	.3060E-03	.3468E-05	.6123E-02
.3700E 01	.9100E-02	.1400E-01	.8619E-04	.7844E-06	.3746E-03	.1207E-05	.1013E-02
.3800E 01	.7700E-02	.7600E-02	.8095E-04	.6233E-06	.4447E-03	.6314E-06	.8963E-03
.3900E 01	.7000E-02	.6412E-03	.7599E-04	.5319E-06	.5021E-03	.4873E-07	.8418E-03
.4000E 01	.6967E-02	.5333E-02	.7132E-04	.4969E-06	.5534E-03	.3803E-06	.8398E-03
.4100E 01	.7500E-02	.9042E-02	.6691E-04	.5018E-06	.6034E-03	.6050E-06	.8763E-03
.4200E 01	.8600E-02	.1867E-01	.6278E-04	.5397E-06	.6552E-03	.1184E-05	.9485E-03
.4300E 01	.1070E-01	.2800E-01	.5854E-04	.6296E-06	.7135E-03	.1648E-05	.1076E-02
.4400E 01	.1350E-01	.3500E-01	.5516E-04	.7447E-06	.7824E-03	.1931E-05	.1236E-02
.4500E 01	.1700E-01	.4000E-01	.5169E-04	.6788E-06	.8638E-03	.2063E-05	.1423E-02
.4600E 01	.2156E-01	.3722E-02	.4643E-04	.1044E-05	.9596E-03	.1803E-06	.1649E-02
.4700E 01	.2000E-01	.5000E-01	.4537E-04	.9073E-06	.1059E-02	.2268E-05	.1575E-02
.4800E 01	.1650E-01	.5499E-02	.4249E-04	.7010E-06	.1138E-02	.2336E-06	.1423E-02
.4900E 01	.1800E-01	.5300E-01	.3978E-04	.7160E-06	.1208E-02	.2103E-05	.1486E-02
.5000E 01	.2330E-01	.3040E-01	.3724E-04	.8676E-06	.1287E-02	.1132E-05	.1689E-02
.5100E 01	.2634E-01	.1996E-01	.3485E-04	.9180E-06	.1376E-02	.6956E-06	.1793E-02
.5200E 01	.2634E-01	.2414E-01	.3261E-04	.9240E-06	.1469E-02	.7872E-06	.1866E-02
.5300E 01	.3075E-01	.2414E-01	.3051E-04	.9381E-06	.1562E-02	.7365E-06	.1942E-02
.5400E 01	.3316E-01	.2270E-01	.2854E-04	.9464E-06	.1656E-02	.6478E-06	.2013E-02
.5500E 01	.3543E-01	.2270E-01	.2669E-04	.9457E-06	.1751E-02	.6058E-06	.2076E-02
.5600E 01	.3770E-01	.2186E-01	.2496E-04	.9409E-06	.1845E-02	.5455E-06	.2134E-02
.5700E 01	.3989E-01	.2186E-01	.2333E-04	.9307E-06	.1939E-02	.5100E-06	.2137E-02
.5800E 01	.4208E-01	.2162E-01	.2181E-04	.9177E-06	.2031E-02	.4715E-06	.2236E-02
.5900E 01	.4424E-01	.2162E-01	.2038E-04	.9018E-06	.2122E-02	.4407E-06	.2262E-02
.6000E 01	.4640E-01	.2108E-01	.1905E-04	.8839E-06	.2211E-02	.4016E-06	.2324E-02
.6100E 01	.4851E-01	.2108E-01	.1780E-04	.8634E-06	.2299E-02	.3752E-06	.2363E-02
.6200E 01	.5062E-01	.2124E-01	.1663E-04	.8417E-06	.2384E-02	.3532E-06	.2399E-02
.6300E 01	.5274E-01	.2124E-01	.1553E-04	.8192E-06	.2467E-02	.3299E-06	.2433E-02
.6400E 01	.5486E-01	.2212E-01	.1451E-04	.7960E-06	.2548E-02	.3209E-06	.2465E-02
.6500E 01	.5706E-01	.2212E-01	.1355E-04	.7734E-06	.2626E-02	.2997E-06	.2496E-02
.6600E 01	.5929E-01	.2192E-01	.1265E-04	.7501E-06	.2702E-02	.2773E-06	.2525E-02
.6700E 01	.6148E-01	.2192E-01	.1181E-04	.7263E-06	.2776E-02	.2589E-06	.2552E-02
.6800E 01	.6367E-01	.2064E-01	.1103E-04	.7022E-06	.2848E-02	.2276E-06	.2577E-02

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E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.6900E 01	.6574E-01	.2064E-01	.1029E-04	.6767E-06	.2917E-02	.2125E-06	.2599E-02
.7000E 01	.6780E-01	.1876E-01	.9609E-05	.6515E-06	.2983E-02	.1803E-06	.2620E-02
.7100E 01	.6968E-01	.1676E-01	.8968E-05	.6248E-06	.3047E-02	.1682E-06	.2637E-02
.7200E 01	.7155E-01	.1528E-01	.8369E-05	.5988E-06	.3108E-02	.1530E-06	.2653E-02
.7300E 01	.7338E-01	.1328E-01	.7809E-05	.5730E-06	.3167E-02	.1427E-06	.2669E-02
.7400E 01	.7521E-01	.1196E-01	.7256E-05	.5479E-06	.3223E-02	.1309E-06	.2682E-02
.7500E 01	.7700E-01	.1079E-01	.6797E-05	.5234E-06	.3276E-02	.1221E-06	.2694E-02
.7600E 01	.7880E-01	.9740E-01	.6341E-05	.4996E-06	.3327E-02	.1103E-06	.2706E-02
.7700E 01	.8054E-01	.8740E-01	.5914E-05	.4763E-06	.3376E-02	.1029E-06	.2717E-02
.7800E 01	.8228E-01	.7660E-01	.5516E-05	.4539E-06	.3423E-02	.9157E-07	.2727E-02
.7900E 01	.8394E-01	.6600E-01	.5144E-05	.4318E-06	.3467E-02	.8540E-07	.2736E-02
.8000E 01	.8560E-01	.5688E-01	.4797E-05	.4106E-06	.3509E-02	.8098E-07	.2744E-02
.8100E 01	.8729E-01	.4888E-01	.4473E-05	.3905E-06	.3549E-02	.7551E-07	.2752E-02
.8200E 01	.8898E-01	.4164E-01	.4171E-05	.3711E-06	.3587E-02	.6106E-07	.2759E-02
.8300E 01	.9044E-01	.3608E-01	.3885E-05	.3517E-06	.3623E-02	.5693E-07	.2765E-02
.8400E 01	.9190E-01	.3120E-01	.3625E-05	.3332E-06	.3657E-02	.4606E-07	.2770E-02
.8500E 01	.9302E-01	.2720E-01	.3379E-05	.3143E-06	.3690E-02	.3785E-07	.2774E-02
.8600E 01	.9414E-01	.2560E-02	.3150E-05	.2965E-06	.3720E-02	.3011E-07	.2778E-02
.8700E 01	.9510E-01	.2560E-02	.2936E-05	.2792E-06	.3749E-02	.2807E-07	.2781E-02
.8800E 01	.9606E-01	.2720E-02	.2736E-05	.2628E-06	.3776E-02	.2660E-07	.2784E-02
.8900E 01	.9703E-01	.2720E-02	.2550E-05	.2474E-06	.3802E-02	.2479E-07	.2786E-02
.9000E 01	.9800E-01	.1240E-01	.2376E-05	.2329E-06	.3826E-02	.2946E-07	.2789E-02
.9100E 01	.9924E-01	.1240E-01	.2214E-05	.2197E-06	.3848E-02	.2746E-07	.2791E-02
.9200E 01	.1005E 00	.9200E-02	.2063E-05	.2073E-06	.3870E-02	.1898E-07	.2794E-02
.9300E 01	.1014E 00	.9200E-02	.1922E-05	.1949E-06	.3890E-02	.1768E-07	.2796E-02
.9400E 01	.1023E 00	.5401E-02	.1791E-05	.1832E-06	.3909E-02	.9672E-08	.2798E-02
.9500E 01	.1029E 00	.5400E-02	.1668E-05	.1716E-06	.3926E-02	.9009E-08	.2799E-02
.9600E 01	.1034E 00	.2561E-02	.1554E-05	.1607E-06	.3943E-02	.3886E-08	.2799E-02
.9700E 01	.1036E 00	.2560E-02	.1446E-05	.1501E-06	.3958E-02	.3619E-08	.2800E-02
.9800E 01	.1039E 00	.5006E-03	.1343E-05	.1401E-06	.3973E-02	.6750E-09	.2800E-02
.9900E 01	.1039E 00	.5000E-03	.1256E-05	.1306E-06	.3986E-02	.6280E-09	.2800E-02
.1000E 02	.1040E 00	-.2959E-02	.1170E-05	.1217E-06	.3999E-02	-.3462E-08	.2800E-02
.1010E 02	.1037E 00	-.2960E-02	.1059E-05	.1130E-06	.4011E-02	-.3225E-08	.2800E-02
.1020E 02	.1034E 00	-.2960E-02	.1014E-05	.1049E-06	.4022E-02	-.3003E-08	.2800E-02
.1030E 02	.1031E 00	-.2960E-02	.9447E-06	.9741E-07	.4032E-02	-.2796E-08	.2799E-02
.1040E 02	.1028E 00	-.2960E-02	.8797E-06	.9045E-07	.4041E-02	-.2604E-08	.2799E-02
.1050E 02	.1025E 00	-.5039E-02	.8191E-06	.8397E-07	.4050E-02	-.4128E-08	.2799E-02
.1060E 02	.1020E 00	-.5040E-02	.7627E-06	.7780E-07	.4058E-02	-.3844E-08	.2798E-02
.1070E 02	.1015E 00	-.5040E-02	.7101E-06	.7208E-07	.4065E-02	-.3579E-08	.2798E-02
.1080E 02	.1010E 00	-.5040E-02	.6611E-06	.6677E-07	.4072E-02	-.3332E-08	.2798E-02
.1090E 02	.1005E 00	-.5040E-02	.6154E-06	.6185E-07	.4079E-02	-.3102E-08	.2797E-02
.1100E 02	.1000E 00	-.7969E-02	.5729E-06	.5729E-07	.4085E-02	-.4566E-08	.2797E-02
.1110E 02	.9920E-01	-.7970E-02	.5333E-06	.5291E-07	.4090E-02	-.4251E-08	.2797E-02
.1120E 02	.9841E-01	-.7970E-02	.4965E-06	.4885E-07	.4095E-02	-.3957E-08	.2796E-02
.1130E 02	.9761E-01	-.7970E-02	.4621E-06	.4511E-07	.4100E-02	-.3683E-08	.2796E-02
.1140E 02	.9681E-01	-.7970E-02	.4301E-06	.4164E-07	.4104E-02	-.3423E-08	.2795E-02
.1150E 02	.9602E-01	-.7630E-02	.4003E-06	.3844E-07	.4108E-02	-.3055E-08	.2795E-02
.1160E 02	.9525E-01	-.7630E-02	.3726E-06	.3549E-07	.4112E-02	-.2843E-08	.2795E-02
.1170E 02	.9449E-01	-.7630E-02	.3468E-06	.3276E-07	.4115E-02	-.2646E-08	.2795E-02
.1180E 02	.9373E-01	-.7630E-02	.3227E-06	.3025E-07	.4119E-02	-.2462E-08	.2794E-02

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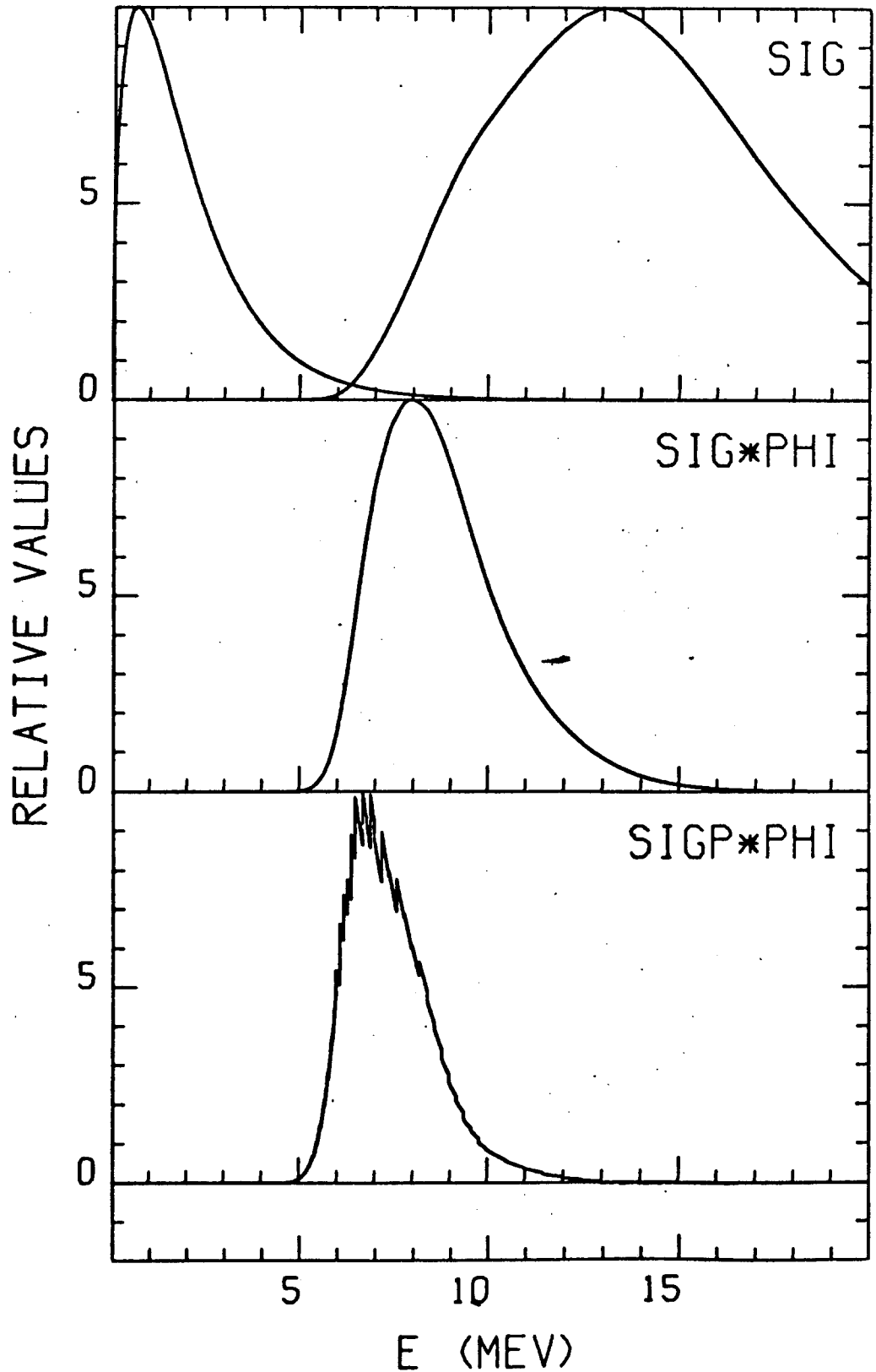
E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1190E 02	.9296E-01	-.7630E-02	.3003E-06	.2792E-07	.4121E-02	-.2291E-08	.2794E-02
.1200E 02	.9220E-01	-.7926E-02	.2795E-06	.2577E-07	.4124E-02	-.2215E-08	.2794E-02
.1210E 02	.9141E-01	-.7926E-02	.2600E-06	.2377E-07	.4127E-02	-.2061E-08	.2794E-02
.1220E 02	.9061E-01	-.7926E-02	.2420E-06	.2193E-07	.4129E-02	-.1918E-08	.2793E-02
.1230E 02	.8982E-01	-.7926E-02	.2251E-06	.2022E-07	.4131E-02	-.1785E-08	.2793E-02
.1240E 02	.8903E-01	-.7926E-02	.2095E-06	.1865E-07	.4133E-02	-.1660E-08	.2793E-02
.1250E 02	.8824E-01	-.6475E-02	.1949E-06	.1720E-07	.4135E-02	-.1262E-08	.2793E-02
.1260E 02	.8759E-01	-.6474E-02	.1813E-06	.1588E-07	.4136E-02	-.1174E-08	.2793E-02
.1270E 02	.8694E-01	-.6474E-02	.1687E-06	.1467E-07	.4138E-02	-.1092E-08	.2793E-02
.1280E 02	.8629E-01	-.6474E-02	.1570E-06	.1354E-07	.4139E-02	-.1016E-08	.2793E-02
.1290E 02	.8565E-01	-.6474E-02	.1460E-06	.1251E-07	.4141E-02	-.9453E-09	.2792E-02
.1300E 02	.8500E-01	-.6552E-02	.1358E-06	.1155E-07	.4142E-02	-.9307E-09	.2792E-02
.1310E 02	.8431E-01	-.6552E-02	.1264E-06	.1065E-07	.4143E-02	-.8658E-09	.2792E-02
.1320E 02	.8363E-01	-.6552E-02	.1175E-06	.9830E-08	.4144E-02	-.8054E-09	.2792E-02
.1330E 02	.8294E-01	-.6552E-02	.1093E-06	.9069E-08	.4145E-02	-.7492E-09	.2792E-02
.1340E 02	.8226E-01	-.6552E-02	.1017E-06	.8366E-08	.4146E-02	-.6968E-09	.2792E-02
.1350E 02	.8157E-01	-.7748E-02	.9459E-07	.7716E-08	.4147E-02	-.7329E-09	.2792E-02
.1360E 02	.8080E-01	-.7748E-02	.8798E-07	.7109E-08	.4147E-02	-.6817E-09	.2792E-02
.1370E 02	.8002E-01	-.7748E-02	.8133E-07	.6549E-08	.4148E-02	-.6340E-09	.2792E-02
.1380E 02	.7925E-01	-.7748E-02	.7611E-07	.6032E-08	.4149E-02	-.5897E-09	.2792E-02
.1390E 02	.7847E-01	-.7748E-02	.7076E-07	.5555E-08	.4149E-02	-.5484E-09	.2792E-02
.1400E 02	.7770E-01	-.7452E-02	.6583E-07	.5115E-08	.4150E-02	-.4906E-09	.2792E-02
.1410E 02	.7695E-01	-.7452E-02	.6122E-07	.4711E-08	.4150E-02	-.4562E-09	.2792E-02
.1420E 02	.7621E-01	-.7452E-02	.5693E-07	.4339E-08	.4151E-02	-.4243E-09	.2792E-02
.1430E 02	.7546E-01	-.7452E-02	.5294E-07	.3995E-08	.4151E-02	-.3945E-09	.2792E-02
.1440E 02	.7472E-01	-.7452E-02	.4923E-07	.3679E-08	.4151E-02	-.3669E-09	.2792E-02
.1450E 02	.7397E-01	-.7548E-02	.4578E-07	.3387E-08	.4152E-02	-.3639E-09	.2791E-02
.1460E 02	.7318E-01	-.7548E-02	.4257E-07	.3115E-08	.4152E-02	-.3384E-09	.2791E-02
.1470E 02	.7238E-01	-.7948E-02	.3959E-07	.2865E-08	.4152E-02	-.3146E-09	.2791E-02
.1480E 02	.7159E-01	-.7948E-02	.3681E-07	.2635E-08	.4153E-02	-.2926E-09	.2791E-02
.1490E 02	.7079E-01	-.7948E-02	.3422E-07	.2423E-08	.4153E-02	-.2720E-09	.2791E-02
.1500E 02	.7000E-01	-.7192E-02	.3182E-07	.2228E-08	.4153E-02	-.2289E-09	.2791E-02
.1510E 02	.6928E-01	-.7192E-02	.2959E-07	.2050E-08	.4153E-02	-.2128E-09	.2791E-02
.1520E 02	.6856E-01	-.7192E-02	.2751E-07	.1886E-08	.4154E-02	-.1978E-09	.2791E-02
.1530E 02	.6784E-01	-.7192E-02	.2550E-07	.1735E-08	.4154E-02	-.1839E-09	.2791E-02
.1540E 02	.6712E-01	-.7192E-02	.2378E-07	.1596E-08	.4154E-02	-.1710E-09	.2791E-02
.1550E 02	.6640E-01	-.7408E-02	.2211E-07	.1468E-08	.4154E-02	-.1638E-09	.2791E-02
.1560E 02	.6566E-01	-.7408E-02	.2055E-07	.1349E-08	.4154E-02	-.1522E-09	.2791E-02
.1570E 02	.6492E-01	-.7408E-02	.1911E-07	.1240E-08	.4154E-02	-.1415E-09	.2791E-02
.1580E 02	.6418E-01	-.7408E-02	.1776E-07	.1140E-08	.4155E-02	-.1316E-09	.2791E-02
.1590E 02	.6344E-01	-.7408E-02	.1651E-07	.1047E-08	.4155E-02	-.1223E-09	.2791E-02
.1600E 02	.6270E-01	-.7706E-02	.1535E-07	.9623E-09	.4155E-02	-.1195E-09	.2791E-02
.1610E 02	.6192E-01	-.7706E-02	.1427E-07	.8835E-09	.4155E-02	-.1111E-09	.2791E-02
.1620E 02	.6114E-01	-.7706E-02	.1326E-07	.8109E-09	.4155E-02	-.1033E-09	.2791E-02
.1630E 02	.6036E-01	-.7706E-02	.1233E-07	.7442E-09	.4155E-02	-.9598E-10	.2791E-02
.1640E 02	.5959E-01	-.7706E-02	.1145E-07	.6828E-09	.4155E-02	-.8922E-10	.2791E-02
.1650E 02	.5881E-01	-.7214E-02	.1065E-07	.6264E-09	.4155E-02	-.7684E-10	.2791E-02
.1660E 02	.5809E-01	-.7214E-02	.9900E-08	.5751E-09	.4155E-02	-.7142E-10	.2791E-02
.1670E 02	.5736E-01	-.7214E-02	.9202E-08	.5279E-09	.4155E-02	-.6638E-10	.2791E-02
.1680E 02	.5664E-01	-.7214E-02	.8553E-08	.4845E-09	.4155E-02	-.6170E-10	.2791E-02

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E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1690E 02	.5592E-01	-.7214E-02	.7949E-08	.4445E-09	.4155E-02	-.5735E-10	.2791E-02
.1700E 02	.5520E-01	-.7038E-02	.7388E-08	.4078E-09	.4155E-02	-.5200E-10	.2791E-02
.1710E 02	.5450E-01	-.7038E-02	.6867E-08	.3742E-09	.4155E-02	-.4833E-10	.2791E-02
.1720E 02	.5379E-01	-.7038E-02	.6392E-08	.3433E-09	.4155E-02	-.4492E-10	.2791E-02
.1730E 02	.5309E-01	-.7038E-02	.5931E-08	.3149E-09	.4155E-02	-.4174E-10	.2791E-02
.1740E 02	.5238E-01	-.7038E-02	.5512E-08	.2888E-09	.4156E-02	-.3879E-10	.2791E-02
.1750E 02	.5168E-01	-.7761E-02	.5123E-08	.2647E-09	.4156E-02	-.3976E-10	.2791E-02
.1760E 02	.5090E-01	-.7762E-02	.4761E-08	.2423E-09	.4156E-02	-.3695E-10	.2791E-02
.1770E 02	.5013E-01	-.7762E-02	.4424E-08	.2218E-09	.4156E-02	-.3434E-10	.2791E-02
.1780E 02	.4935E-01	-.7762E-02	.4111E-08	.2029E-09	.4156E-02	-.3191E-10	.2791E-02
.1790E 02	.4858E-01	-.7762E-02	.3821E-08	.1856E-09	.4156E-02	-.2966E-10	.2791E-02
.1800E 02	.4780E-01	-.7600E-02	.3550E-08	.1697E-09	.4156E-02	-.2698E-10	.2791E-02
.1810E 02	.4704E-01	-.7600E-02	.3299E-08	.1552E-09	.4156E-02	-.2507E-10	.2791E-02
.1820E 02	.4628E-01	-.7600E-02	.3066E-08	.1419E-09	.4156E-02	-.2330E-10	.2791E-02
.1830E 02	.4552E-01	-.7600E-02	.2849E-08	.1297E-09	.4156E-02	-.2165E-10	.2791E-02
.1840E 02	.4476E-01	-.7600E-02	.2647E-08	.1185E-09	.4156E-02	-.2012E-10	.2791E-02
.1850E 02	.4400E-01	-.7600E-02	.2460E-08	.1082E-09	.4156E-02	-.1869E-10	.2791E-02
.1860E 02	.4324E-01	-.7600E-02	.2286E-08	.9883E-10	.4156E-02	-.1737E-10	.2791E-02
.1870E 02	.4248E-01	-.7600E-02	.2124E-08	.9021E-10	.4156E-02	-.1614E-10	.2791E-02
.1880E 02	.4172E-01	-.7600E-02	.1973E-08	.8232E-10	.4156E-02	-.1500E-10	.2791E-02
.1890E 02	.4096E-01	-.7600E-02	.1833E-08	.7510E-10	.4156E-02	-.1393E-10	.2791E-02
.1900E 02	.4020E-01	-.7630E-02	.1703E-08	.6848E-10	.4156E-02	-.1300E-10	.2791E-02
.1910E 02	.3944E-01	-.7630E-02	.1583E-08	.6242E-10	.4156E-02	-.1208E-10	.2791E-02
.1920E 02	.3867E-01	-.7630E-02	.1471E-08	.5687E-10	.4156E-02	-.1122E-10	.2791E-02
.1930E 02	.3791E-01	-.7630E-02	.1366E-08	.5180E-10	.4156E-02	-.1042E-10	.2791E-02
.1940E 02	.3715E-01	-.7630E-02	.1269E-08	.4715E-10	.4156E-02	-.9685E-11	.2791E-02
.1950E 02	.3639E-01	-.8369E-02	.1179E-08	.4291E-10	.4156E-02	-.9870E-11	.2791E-02
.1960E 02	.3555E-01	-.8370E-02	.1096E-08	.3895E-10	.4156E-02	-.9171E-11	.2791E-02
.1970E 02	.3471E-01	-.8370E-02	.1013E-08	.3533E-10	.4156E-02	-.8520E-11	.2791E-02
.1980E 02	.3387E-01	-.8370E-02	.9457E-09	.3203E-10	.4156E-02	-.7915E-11	.2791E-02
.1990E 02	.3304E-01	-.8370E-02	.8786E-09	.2902E-10	.4156E-02	-.7353E-11	.2791E-02

SPECTRUM AVERAGE CROSS SECTION = .4156E-02

AL-27 (N, ALPHA) NA-24  
U-235 FISSION SPECTRUM



AL-27(N,ALPHA)VA-24  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.3300E 01	.4615E-22	.8995E-21	.1104E-03	.5094E-26	.1346E-24	.9929E-25	.5275E-23
.3400E 01	.1361E-21	.8995E-21	.1038E-03	.1413E-25	.1110E-23	.9340E-25	.1490E-22
.3500E 01	.2260E-21	.8995E-21	.9762E-04	.2207E-25	.2733E-23	.8761E-25	.2396E-22
.3600E 01	.3150E-21	.1965E-18	.9175E-04	.2899E-25	.3497E-23	.1803E-22	.5041E-22
.3700E 01	.3254E-18	.2337E-16	.8619E-04	.2804E-22	.4380E-21	.2014E-20	.3033E-19
.3800E 01	.3350E-15	.1622E-13	.8095E-04	.2712E-19	.4082E-18	.1313E-17	.2669E-16
.3900E 01	.2884E-13	.1068E-11	.7599E-04	.2191E-17	.3432E-16	.8120E-16	.2306E-14
.4000E 01	.8350E-12	.2511E-10	.7132E-04	.5955E-16	.1921E-14	.1791E-14	.6256E-13
.4100E 01	.1422E-10	.3528E-09	.6691E-04	.9516E-15	.3547E-13	.2360E-13	.9979E-12
.4200E 01	.1450E-09	.3043E-08	.6276E-04	.9100E-14	.4111E-12	.1910E-12	.9554E-11
.4300E 01	.1076E-08	.1936E-07	.5884E-04	.6330E-13	.3281E-11	.1140E-11	.6656E-10
.4400E 01	.5960E-06	.9305E-07	.5516E-04	.3288E-12	.1981E-10	.5132E-11	.3467E-09
.4500E 01	.2679E-07	.3678E-06	.5169E-04	.1385E-11	.9460E-10	.1901E-10	.1465E-08
.4600E 01	.1000E-06	.1218E-05	.4843E-04	.4843E-11	.3757E-09	.5900E-10	.5147E-09
.4700E 01	.3252E-06	.3546E-05	.4537E-04	.1475E-10	.1277E-08	.1609E-09	.1575E-07
.4800E 01	.9320E-06	.9115E-05	.4249E-04	.3960E-10	.3626E-08	.3373E-09	.4244E-07
.4900E 01	.2411E-05	.2135E-04	.3978E-04	.9590E-10	.1825E-07	.8492E-09	.1035E-06
.5000E 01	.5690E-05	.4479E-04	.3724E-04	.2119E-09	.2503E-07	.1668E-08	.2300E-06
.5100E 01	.1246E-04	.8934E-04	.3405E-04	.4344E-09	.3613E-07	.3121E-08	.4746E-06
.5200E 01	.2550E-04	.1664E-03	.3261E-04	.8316E-09	.1175E-06	.5490E-08	.9150E-06
.5300E 01	.4924E-04	.2990E-03	.3051E-04	.1502E-08	.2312E-06	.9121E-08	.1665E-05
.5400E 01	.9020E-04	.5072E-03	.2854E-04	.2574E-08	.4308E-06	.1447E-07	.2876E-05
.5500E 01	.1580E-03	.8190E-03	.2669E-04	.4218E-08	.7645E-06	.2186E-07	.4750E-05
.5600E 01	.2650E-03	.1267E-02	.2476E-04	.6613E-08	.1298E-05	.3162E-07	.7514E-05
.5700E 01	.4270E-03	.1909E-02	.2333E-04	.9963E-08	.2117E-05	.4453E-07	.1143E-04
.5800E 01	.6670E-03	.2773E-02	.2131E-04	.1455E-07	.3331E-05	.6048E-07	.1665E-04
.5900E 01	.1010E-02	.3935E-02	.2035E-04	.2059E-07	.5073E-05	.8021E-07	.2409E-04
.6000E 01	.1490E-02	.6500E-02	.1905E-04	.2838E-07	.7505E-05	.1238E-06	.3357E-04
.6100E 01	.2140E-02	.8500E-02	.1760E-04	.3809E-07	.1085E-04	.1513E-06	.4558E-04
.6200E 01	.2990E-02	.1010E-01	.1663E-04	.4972E-07	.1526E-04	.1680E-06	.6022E-04
.6300E 01	.4000E-02	.1140E-01	.1553E-04	.6213E-07	.2087E-04	.1771E-06	.7648E-04
.6400E 01	.5140E-02	.1400E-01	.1451E-04	.7457E-07	.2773E-04	.2031E-06	.9362E-04
.6500E 01	.6540E-02	.1660E-01	.1355E-04	.8861E-07	.3592E-04	.2249E-06	.1133E-03
.6600E 01	.8200E-02	.1670E-01	.1265E-04	.1037E-06	.4556E-04	.2113E-06	.1350E-03
.6700E 01	.9870E-02	.1930E-01	.1151E-04	.1166E-06	.5661E-04	.2280E-06	.1555E-03
.6800E 01	.1180E-01	.1900E-01	.1103E-04	.1301E-06	.6497E-04	.2095E-06	.1773E-03
.6900E 01	.1370E-01	.2200E-01	.1029E-04	.1410E-06	.8255E-04	.2265E-06	.1978E-03
.7000E 01	.1590E-01	.2100E-01	.9609E-05	.1528E-06	.9727E-04	.2018E-06	.2196E-03
.7100E 01	.1800E-01	.2100E-01	.8936E-05	.1614E-06	.1130E-03	.1883E-06	.2391E-03
.7200E 01	.2010E-01	.2450E-01	.8369E-05	.1682E-06	.1295E-03	.2050E-06	.2573E-03
.7300E 01	.2255E-01	.2450E-01	.7839E-05	.1761E-06	.1467E-03	.1913E-06	.2771E-03
.7400E 01	.2500E-01	.2500E-01	.7236E-05	.1821E-06	.1647E-03	.1821E-06	.2956E-03
.7500E 01	.2750E-01	.2500E-01	.6797E-05	.1869E-06	.1531E-03	.1699E-06	.3132E-03
.7600E 01	.3000E-01	.2800E-01	.6341E-05	.1902E-06	.2020E-03	.1775E-06	.3296E-03
.7700E 01	.3280E-01	.2800E-01	.5914E-05	.1940E-06	.2212E-03	.1656E-06	.3468E-03
.7800E 01	.3560E-01	.2850E-01	.5516E-05	.1964E-06	.2408E-03	.1572E-06	.3628E-03
.7900E 01	.3845E-01	.2850E-01	.5144E-05	.1978E-06	.2605E-03	.1466E-06	.3780E-03
.8000E 01	.4130E-01	.2900E-01	.4797E-05	.1981E-06	.2803E-03	.1391E-06	.3921E-03
.8100E 01	.4420E-01	.2900E-01	.4473E-05	.1977E-06	.3001E-03	.1297E-06	.4055E-03
.8200E 01	.4710E-01	.3100E-01	.4171E-05	.1964E-06	.3198E-03	.1293E-06	.4161E-03



AL-27(N,ALPHA)NA-24  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.6300E 01	.5020E-01	.3100E-01	.3888E-05	.1952E-06	.3394E-03	.1205E-06	.4306E-03
.6400E 01	.5350E-01	.2950E-01	.3625E-05	.1932E-06	.3588E-03	.1069E-06	.4422E-03
.6500E 01	.5625E-01	.2950E-01	.3379E-05	.1901E-06	.3780E-03	.9969E-07	.4525E-03
.6600E 01	.5920E-01	.2650E-01	.3150E-05	.1865E-06	.3968E-03	.8977E-07	.4621E-03
.6700E 01	.6205E-01	.2650E-01	.2936E-05	.1822E-06	.4152E-03	.8367E-07	.4708E-03
.6800E 01	.6490E-01	.2650E-01	.2736E-05	.1776E-06	.4332E-03	.7251E-07	.4789E-03
.6900E 01	.6755E-01	.2650E-01	.2550E-05	.1722E-06	.4507E-03	.6757E-07	.4859E-03
.9000E 01	.7020E-01	.2450E-01	.2376E-05	.1668E-06	.4677E-03	.5622E-07	.4924E-03
.9100E 01	.7265E-01	.2450E-01	.2214E-05	.1609E-06	.4840E-03	.5425E-07	.4980E-03
.9200E 01	.7510E-01	.2300E-01	.2063E-05	.1549E-06	.4998E-03	.4745E-07	.5032E-03
.9300E 01	.7740E-01	.2300E-01	.1922E-05	.1488E-06	.5150E-03	.4421E-07	.5078E-03
.9400E 01	.7970E-01	.2050E-01	.1791E-05	.1427E-06	.5296E-03	.3671E-07	.5121E-03
.9500E 01	.8175E-01	.2050E-01	.1650E-05	.1364E-06	.5435E-03	.3420E-07	.5156E-03
.9600E 01	.8380E-01	.1950E-01	.1554E-05	.1302E-06	.5569E-03	.3031E-07	.5189E-03
.9700E 01	.8575E-01	.1950E-01	.1448E-05	.1241E-06	.5696E-03	.2823E-07	.5219E-03
.9800E 01	.8770E-01	.1750E-01	.1348E-05	.1183E-06	.5817E-03	.2360E-07	.5246E-03
.9900E 01	.8945E-01	.1750E-01	.1250E-05	.1123E-06	.5932E-03	.2198E-07	.5269E-03
.1000E 02	.9120E-01	.1682E-01	.1170E-05	.1067E-06	.6042E-03	.1968E-07	.5290E-03
.1010E 02	.9268E-01	.1682E-01	.1059E-05	.1012E-06	.6146E-03	.1633E-07	.5309E-03
.1020E 02	.9456E-01	.1652E-01	.1014E-05	.9594E-07	.6244E-03	.1707E-07	.5326E-03
.1030E 02	.9625E-01	.1682E-01	.9447E-06	.9093E-07	.6337E-03	.1589E-07	.5343E-03
.1040E 02	.9793E-01	.1652E-01	.8747E-06	.8615E-07	.6426E-03	.1460E-07	.5358E-03
.1050E 02	.9961E-01	.1578E-01	.8191E-06	.8159E-07	.6510E-03	.1292E-07	.5372E-03
.1060E 02	.1012E 00	.1578E-01	.7627E-06	.7717E-07	.6589E-03	.1203E-07	.5385E-03
.1070E 02	.1028E 00	.1578E-01	.7101E-06	.7297E-07	.6664E-03	.1120E-07	.5397E-03
.1080E 02	.1043E 00	.1578E-01	.6611E-06	.6898E-07	.6735E-03	.1043E-07	.5407E-03
.1090E 02	.1059E 00	.1578E-01	.6154E-06	.6519E-07	.6802E-03	.9709E-08	.5417E-03
.1100E 02	.1075E 00	.1486E-01	.5729E-06	.6159E-07	.6865E-03	.8514E-08	.5427E-03
.1110E 02	.1090E 00	.1486E-01	.5333E-06	.5813E-07	.6925E-03	.7925E-08	.5435E-03
.1120E 02	.1105E 00	.1486E-01	.4965E-06	.5484E-07	.6982E-03	.7377E-08	.5443E-03
.1130E 02	.1120E 00	.1486E-01	.4621E-06	.5174E-07	.7035E-03	.6867E-08	.5450E-03
.1140E 02	.1134E 00	.1486E-01	.4301E-06	.4879E-07	.7085E-03	.6391E-08	.5456E-03
.1150E 02	.1149E 00	.1254E-01	.4003E-06	.4601E-07	.7133E-03	.5020E-08	.5463E-03
.1160E 02	.1162E 00	.1254E-01	.3726E-06	.4329E-07	.7177E-03	.4672E-08	.5467E-03
.1170E 02	.1174E 00	.1254E-01	.3466E-06	.4072E-07	.7219E-03	.4348E-08	.5472E-03
.1180E 02	.1187E 00	.1254E-01	.3227E-06	.3830E-07	.7259E-03	.4047E-08	.5476E-03
.1190E 02	.1199E 00	.1254E-01	.3003E-06	.3602E-07	.7296E-03	.3766E-08	.5480E-03
.1200E 02	.1212E 00	.9681E-02	.2795E-06	.3387E-07	.7331E-03	.2705E-08	.5484E-03
.1210E 02	.1222E 00	.9680E-02	.2680E-06	.3177E-07	.7364E-03	.2517E-08	.5486E-03
.1220E 02	.1231E 00	.9680E-02	.2420E-06	.2980E-07	.7394E-03	.2342E-08	.5489E-03
.1230E 02	.1241E 00	.9680E-02	.2251E-06	.2794E-07	.7423E-03	.2179E-08	.5491E-03
.1240E 02	.1251E 00	.9680E-02	.2055E-06	.2620E-07	.7450E-03	.2028E-08	.5493E-03
.1250E 02	.1260E 00	.5522E-02	.1949E-06	.2457E-07	.7476E-03	.1076E-08	.5495E-03
.1260E 02	.1266E 00	.5520E-02	.1613E-06	.2296E-07	.7499E-03	.1001E-08	.5496E-03
.1270E 02	.1271E 00	.5520E-02	.1607E-06	.2145E-07	.7522E-03	.9313E-09	.5497E-03
.1280E 02	.1277E 00	.5520E-02	.1570E-06	.2004E-07	.7542E-03	.8664E-09	.5498E-03
.1290E 02	.1282E 00	.5520E-02	.1460E-06	.1873E-07	.7562E-03	.8060E-09	.5499E-03
.1300E 02	.1286E 00	-.1717E-02	.1350E-06	.1750E-07	.7580E-03	-.2332E-09	.5499E-03
.1310E 02	.1286E 00	-.1720E-02	.1264E-06	.1625E-07	.7597E-03	-.2173E-09	.5499E-03
.1320E 02	.1285E 00	-.1720E-02	.1175E-06	.1510E-07	.7612E-03	-.2022E-09	.5499E-03

AL-27(N,ALPHA)NA-24  
U-235 FISSION SPECTRUM

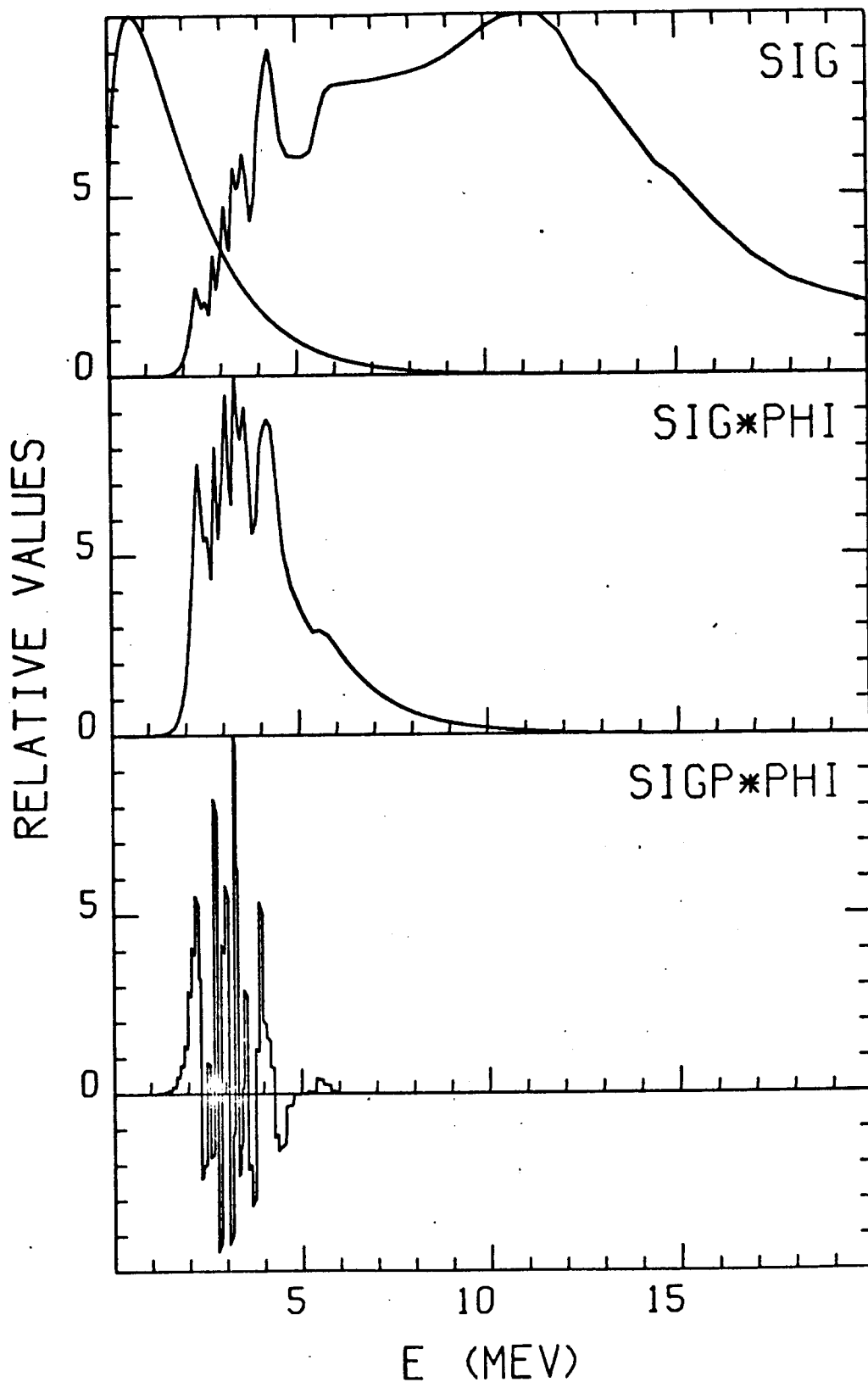
E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.1330E 02	.1283E 00	-.1720E-02	.1093E-06	.1403E-07	.7627E-03	-.1881E-09	.5499E-03
.1340E 02	.1281E 00	-.1720E-02	.1017E-06	.1303E-07	.7540E-03	-.1749E-09	.5499E-03
.1350E 02	.1279E 00	-.6478E-02	.9459E-07	.1210E-07	.7553E-03	-.6128E-09	.5498E-03
.1360E 02	.1273E 00	-.6480E-02	.8798E-07	.1120E-07	.7665E-03	-.5701E-09	.5498E-03
.1370E 02	.1266E 00	-.6430E-02	.8183E-07	.1036E-07	.7675E-03	-.5303E-09	.5497E-03
.1380E 02	.1260E 00	-.6480E-02	.7611E-07	.9589E-08	.7685E-03	-.4932E-09	.5497E-03
.1390E 02	.1253E 00	-.6480E-02	.7075E-07	.8873E-08	.7694E-03	-.4587E-09	.5496E-03
.1400E 02	.1247E 00	-.1068E-01	.6583E-07	.8209E-08	.7703E-03	-.7029E-09	.5496E-03
.1410E 02	.1236E 00	-.1068E-01	.6122E-07	.7569E-08	.7711E-03	-.6538E-09	.5495E-03
.1420E 02	.1226E 00	-.1068E-01	.5693E-07	.6978E-08	.7718E-03	-.6081E-09	.5495E-03
.1430E 02	.1215E 00	-.1068E-01	.5294E-07	.6433E-08	.7725E-03	-.5655E-09	.5494E-03
.1440E 02	.1204E 00	-.1068E-01	.4923E-07	.5929E-08	.7731E-03	-.5258E-09	.5493E-03
.1450E 02	.1194E 00	-.1292E-01	.4578E-07	.5465E-08	.7737E-03	-.5915E-09	.5493E-03
.1460E 02	.1181E 00	-.1292E-01	.4257E-07	.5026E-08	.7742E-03	-.5500E-09	.5492E-03
.1470E 02	.1168E 00	-.1292E-01	.3959E-07	.4623E-08	.7747E-03	-.5115E-09	.5492E-03
.1480E 02	.1155E 00	-.1292E-01	.3681E-07	.4251E-08	.7751E-03	-.4756E-09	.5491E-03
.1490E 02	.1142E 00	-.1292E-01	.3422E-07	.3908E-08	.7755E-03	-.4422E-09	.5491E-03
.1500E 02	.1129E 00	-.1538E-01	.3182E-07	.3593E-08	.7759E-03	-.4894E-09	.5490E-03
.1510E 02	.1114E 00	-.1538E-01	.2959E-07	.3295E-08	.7762E-03	-.4550E-09	.5490E-03
.1520E 02	.1098E 00	-.1538E-01	.2751E-07	.3021E-08	.7766E-03	-.4231E-09	.5490E-03
.1530E 02	.1083E 00	-.1538E-01	.2558E-07	.2769E-08	.7769E-03	-.3933E-09	.5489E-03
.1540E 02	.1067E 00	-.1538E-01	.2375E-07	.2538E-08	.7771E-03	-.3657E-09	.5489E-03
.1550E 02	.1052E 00	-.1642E-01	.2211E-07	.2326E-08	.7774E-03	-.3630E-09	.5488E-03
.1560E 02	.1036E 00	-.1642E-01	.2055E-07	.2128E-08	.7776E-03	-.3374E-09	.5488E-03
.1570E 02	.1019E 00	-.1642E-01	.1911E-07	.1947E-08	.7778E-03	-.3137E-09	.5488E-03
.1580E 02	.1003E 00	-.1642E-01	.1776E-07	.1781E-08	.7780E-03	-.2916E-09	.5487E-03
.1590E 02	.9864E-01	-.1642E-01	.1651E-07	.1629E-08	.7781E-03	-.2711E-09	.5487E-03
.1600E 02	.9700E-01	-.1719E-01	.1535E-07	.1489E-08	.7783E-03	-.2638E-09	.5487E-03
.1610E 02	.9528E-01	-.1719E-01	.1427E-07	.1359E-08	.7784E-03	-.2452E-09	.5487E-03
.1620E 02	.9356E-01	-.1719E-01	.1326E-07	.1241E-08	.7786E-03	-.2280E-09	.5486E-03
.1630E 02	.9184E-01	-.1719E-01	.1233E-07	.1132E-08	.7787E-03	-.2119E-09	.5486E-03
.1640E 02	.9012E-01	-.1719E-01	.1146E-07	.1033E-08	.7788E-03	-.1970E-09	.5486E-03
.1650E 02	.8841E-01	-.1801E-01	.1065E-07	.9416E-09	.7789E-03	-.1918E-09	.5486E-03
.1660E 02	.8660E-01	-.1801E-01	.9900E-08	.8574E-09	.7790E-03	-.1783E-09	.5486E-03
.1670E 02	.8480E-01	-.1801E-01	.9202E-08	.7804E-09	.7791E-03	-.1657E-09	.5485E-03
.1680E 02	.8300E-01	-.1801E-01	.8553E-08	.7099E-09	.7791E-03	-.1541E-09	.5485E-03
.1690E 02	.8120E-01	-.1801E-01	.7949E-08	.6455E-09	.7792E-03	-.1432E-09	.5485E-03
.1700E 02	.7940E-01	-.1643E-01	.7388E-08	.5866E-09	.7793E-03	-.1214E-09	.5485E-03
.1710E 02	.7776E-01	-.1643E-01	.6867E-08	.5339E-09	.7793E-03	-.1126E-09	.5485E-03
.1720E 02	.7611E-01	-.1643E-01	.6352E-08	.4858E-09	.7794E-03	-.1048E-09	.5485E-03
.1730E 02	.7447E-01	-.1643E-01	.5931E-08	.4417E-09	.7794E-03	-.9742E-10	.5485E-03
.1740E 02	.7283E-01	-.1643E-01	.5512E-08	.4014E-09	.7795E-03	-.9054E-10	.5485E-03
.1750E 02	.7119E-01	-.1478E-01	.5123E-08	.3647E-09	.7795E-03	-.7671E-10	.5484E-03
.1760E 02	.6969E-01	-.1497E-01	.4761E-08	.3318E-09	.7795E-03	-.7129E-10	.5484E-03
.1770E 02	.6819E-01	-.1497E-01	.4424E-08	.3017E-09	.7796E-03	-.6625E-10	.5484E-03
.1780E 02	.6669E-01	-.1497E-01	.4111E-08	.2742E-09	.7796E-03	-.6156E-10	.5484E-03
.1790E 02	.6520E-01	-.1497E-01	.3821E-08	.2491E-09	.7796E-03	-.5721E-10	.5484E-03
.1800E 02	.6370E-01	-.1433E-01	.3550E-08	.2262E-09	.7797E-03	-.5086E-10	.5484E-03
.1810E 02	.6227E-01	-.1433E-01	.3299E-08	.2054E-09	.7797E-03	-.4726E-10	.5484E-03
.1820E 02	.6083E-01	-.1433E-01	.3066E-08	.1865E-09	.7797E-03	-.4392E-10	.5484E-03

AL-27(N,ALPHA)NA-24  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.1830E 02	.5940E-01	-.1433E-01	.2849E-08	.1692E-09	.7797E-03	-.4081E-10	.5484E-03
.1840E 02	.5797E-01	-.1433E-01	.2647E-08	.1535E-09	.7797E-03	-.3792E-10	.5484E-03
.1850E 02	.5654E-01	-.1347E-01	.2460E-08	.1391E-09	.7797E-03	-.3314E-10	.5484E-03
.1860E 02	.5519E-01	-.1347E-01	.2280E-08	.1261E-09	.7798E-03	-.3080E-10	.5484E-03
.1870E 02	.5384E-01	-.1347E-01	.2124E-08	.1143E-09	.7798E-03	-.2861E-10	.5484E-03
.1880E 02	.5249E-01	-.1347E-01	.1973E-08	.1036E-09	.7798E-03	-.2639E-10	.5484E-03
.1890E 02	.5115E-01	-.1347E-01	.1833E-08	.9377E-10	.7798E-03	-.2470E-10	.5484E-03
.1900E 02	.4980E-01	-.1273E-01	.1703E-08	.8483E-10	.7798E-03	-.2168E-10	.5484E-03
.1910E 02	.4853E-01	-.1273E-01	.1583E-08	.7681E-10	.7798E-03	-.2014E-10	.5484E-03
.1920E 02	.4725E-01	-.1273E-01	.1471E-08	.6949E-10	.7798E-03	-.1871E-10	.5484E-03
.1930E 02	.4598E-01	-.1273E-01	.1366E-08	.6282E-10	.7798E-03	-.1739E-10	.5484E-03
.1940E 02	.4471E-01	-.1273E-01	.1269E-08	.5675E-10	.7798E-03	-.1615E-10	.5484E-03
.1950E 02	.4344E-01	-.1088E-01	.1179E-08	.5123E-10	.7798E-03	-.1283E-10	.5484E-03
.1960E 02	.4235E-01	-.1087E-01	.1096E-08	.4640E-10	.7798E-03	-.1191E-10	.5484E-03
.1970E 02	.4126E-01	-.1087E-01	.1018E-08	.4200E-10	.7798E-03	-.1107E-10	.5484E-03
.1980E 02	.4017E-01	-.1087E-01	.9457E-09	.3799E-10	.7798E-03	-.1028E-10	.5484E-03
.1990E 02	.3909E-01	-.1087E-01	.8786E-09	.3434E-10	.7798E-03	-.9553E-11	.5484E-03

SPECTRUM AVERAGE CROSS SECTION = .7798E-03

S-32(N, P)P-32  
U-235 FISSION SPECTRUM



S-32(N,P)P-32  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.1000E 01	.1280E-04	.1220E-03	.3501E-03	.4482E-08	.9395E-07	.4271E-07	.4549E-05
.1100E 01	.2500E-04	.2500E-03	.3403E-03	.8507E-08	.7526E-06	.8507E-07	.8805E-05
.1200E 01	.5000E-04	.6200E-03	.3294E-03	.1647E-07	.2010E-05	.2042E-06	.1730E-04
.1300E 01	.1120E-03	.1130E-02	.3177E-03	.3558E-07	.4635E-05	.3749E-06	.3753E-04
.1400E 01	.2300E-03	.2400E-02	.3055E-03	.7026E-07	.9969E-05	.7332E-06	.7467E-04
.1500E 01	.4700E-03	.4300E-02	.2930E-03	.1377E-06	.2045E-04	.1407E-05	.1472E-03
.1600E 01	.9500E-03	.8500E-02	.2800E-03	.2664E-06	.4083E-04	.2384E-05	.2858E-03
.1700E 01	.1300E-02	.2200E-01	.2679E-03	.4822E-06	.7554E-04	.5894E-05	.5224E-03
.1800E 01	.4000E-02	.3600E-01	.2554E-03	.1022E-05	.1545E-03	.9707E-05	.1102E-02
.1900E 01	.7600E-02	.6700E-01	.2432E-03	.1897E-05	.3016E-03	.1629E-04	.2056E-02
.2000E 01	.1450E-01	.1500E 00	.2312E-03	.3353E-05	.5661E-03	.3463E-04	.3664E-02
.2100E 01	.2950E-01	.2250E 00	.2196E-03	.6477E-05	.1062E-02	.4940E-04	.7060E-02
.2200E 01	.5200E-01	.3200E 00	.2083E-03	.1083E-04	.1934E-02	.6664E-04	.1133E-01
.2300E 01	.8400E-01	.2800E 00	.1973E-03	.1658E-04	.3312E-02	.3947E-04	.1835E-01
.2400E 01	.8650E-01	.1350E 00	.1866E-03	.1616E-04	.5033E-02	.2522E-04	.1682E-01
.2500E 01	.7300E-01	.6000E-01	.1767E-03	.1290E-04	.6482E-02	.1060E-04	.1640E-01
.2600E 01	.7900E-01	.1350E 00	.1670E-03	.1319E-04	.7787E-02	.2170E-04	.1740E-01
.2700E 01	.6600E-01	.6300E 00	.1577E-03	.1041E-04	.8963E-02	.9933E-04	.1541E-01
.2800E 01	.1290E 00	.3600E 00	.1466E-03	.1919E-04	.1046E-01	.5356E-04	.2491E-01
.2900E 01	.3300E-01	.3600E 00	.1403E-03	.1305E-04	.1206E-01	.5051E-04	.1981E-01
.3000E 01	.1290E 00	.5300E 00	.1323E-03	.1706E-04	.1357E-01	.7009E-04	.2473E-01
.3100E 01	.1820E 00	.4410E 00	.1246E-03	.2267E-04	.1557E-01	.5108E-04	.3142E-01
.3200E 01	.1410E 00	.1200E 00	.1173E-03	.1654E-04	.1752E-01	.1408E-04	.2650E-01
.3300E 01	.1680E 00	.7000E 00	.1104E-03	.2075E-04	.1922E-01	.7727E-04	.3134E-01
.3400E 01	.2100E 00	.1500E 00	.1036E-03	.2180E-04	.2148E-01	.1869E-04	.3418E-01
.3500E 01	.2020E 00	.3600E 00	.9762E-04	.1972E-04	.2353E-01	.3514E-04	.3341E-01
.3600E 01	.2380E 00	.2800E 00	.9175E-04	.2184E-04	.2561E-01	.2569E-04	.3676E-01
.3700E 01	.2100E 00	.4400E 00	.8619E-04	.1810E-04	.2760E-01	.3792E-04	.3425E-01
.3800E 01	.1660E 00	.1900E 00	.8095E-04	.1344E-04	.2917E-01	.1538E-04	.3063E-01
.3900E 01	.1650E 00	.6500E 00	.7549E-04	.1406E-04	.3055E-01	.6459E-04	.3217E-01
.4000E 01	.2700E 00	.3500E 00	.7132E-04	.1926E-04	.3223E-01	.2496E-04	.3839E-01
.4100E 01	.3050E 00	.2900E 00	.6691E-04	.2041E-04	.3421E-01	.1940E-04	.4081E-01
.4200E 01	.3340E 00	.1500E 00	.6276E-04	.2096E-04	.3628E-01	.9414E-05	.4268E-01
.4300E 01	.3490E 00	.2500E 00	.5864E-04	.2054E-04	.3836E-01	.1471E-04	.4356E-01
.4400E 01	.3240E 00	.3500E 00	.5516E-04	.1787E-04	.4027E-01	.1931E-04	.4213E-01
.4500E 01	.2690E 00	.3500E 00	.5169E-04	.1494E-04	.4191E-01	.1809E-04	.4027E-01
.4600E 01	.2540E 00	.9001E-01	.4643E-04	.1230E-04	.4327E-01	.4359E-05	.3853E-01
.4700E 01	.2450E 00	.9000E-01	.4537E-04	.1111E-04	.4444E-01	.4083E-05	.3810E-01
.4800E 01	.2360E 00	.5004E-02	.4249E-04	.1003E-04	.4549E-01	.2126E-06	.3771E-01
.4900E 01	.2355E 00	.5000E-02	.3978E-04	.9368E-05	.4646E-01	.1989E-06	.3769E-01
.5000E 01	.2350E 00	.2547E-06	.3724E-04	.8751E-05	.4737E-01	.9483E-11	.3767E-01
.5100E 01	.2350E 00	.0000E 00	.3485E-04	.8190E-05	.4821E-01	.0000E 00	.3757E-01
.5200E 01	.2350E 00	.2500E-01	.3261E-04	.7663E-05	.4901E-01	.8152E-06	.3767E-01
.5300E 01	.2375E 00	.2500E-01	.3051E-04	.7246E-05	.4975E-01	.7627E-06	.3775E-01
.5400E 01	.2400E 00	.1650E 00	.2854E-04	.6849E-05	.5046E-01	.5279E-05	.3783E-01
.5500E 01	.2585E 00	.1850E 00	.2669E-04	.6899E-05	.5114E-01	.4937E-05	.3834E-01
.5600E 01	.2770E 00	.1300E 00	.2496E-04	.6913E-05	.5183E-01	.3244E-05	.3682E-01
.5700E 01	.2900E 00	.1300E 00	.2333E-04	.6766E-05	.5252E-01	.3033E-05	.3913E-01
.5800E 01	.3030E 00	.4001E-01	.2181E-04	.6608E-05	.5319E-01	.8725E-06	.3942E-01
.5900E 01	.3070E 00	.4000E-01	.2038E-04	.6258E-05	.5383E-01	.8154E-06	.3951E-01

S-32(N,P)P-32  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.6000E 01	.3110E 00	.6000E-02	.1905E-04	.5924E-05	.5444E-01	.1143E-06	.3959E-01
.6100E 01	.3116E 00	.6000E-02	.1780E-04	.5546E-05	.5501E-01	.1068E-06	.3967E-01
.6200E 01	.3122E 00	.6000E-02	.1663E-04	.5192E-05	.5555E-01	.9977E-07	.3961E-01
.6300E 01	.3128E 00	.6000E-02	.1553E-04	.4859E-05	.5605E-01	.9320E-07	.3962E-01
.6400E 01	.3134E 00	.6000E-02	.1451E-04	.4547E-05	.5652E-01	.8705E-07	.3963E-01
.6500E 01	.3140E 00	.4000E-02	.1355E-04	.4255E-05	.5696E-01	.5420E-07	.3963E-01
.6600E 01	.3144E 00	.4000E-02	.1265E-04	.3978E-05	.5737E-01	.5061E-07	.3964E-01
.6700E 01	.3148E 00	.4000E-02	.1161E-04	.3719E-05	.5776E-01	.4725E-07	.3964E-01
.6800E 01	.3152E 00	.4000E-02	.1103E-04	.3476E-05	.5812E-01	.4411E-07	.3965E-01
.6900E 01	.3156E 00	.4000E-02	.1029E-04	.3249E-05	.5845E-01	.4118E-07	.3965E-01
.7000E 01	.3160E 00	.8000E-02	.9609E-05	.3036E-05	.5877E-01	.7687E-07	.3966E-01
.7100E 01	.3163E 00	.8000E-02	.8965E-05	.2841E-05	.5906E-01	.7174E-07	.3966E-01
.7200E 01	.3176E 00	.8000E-02	.8369E-05	.2658E-05	.5933E-01	.6695E-07	.3967E-01
.7300E 01	.3184E 00	.8000E-02	.7809E-05	.2486E-05	.5959E-01	.6247E-07	.3968E-01
.7400E 01	.3192E 00	.8000E-02	.7266E-05	.2326E-05	.5983E-01	.5829E-07	.3968E-01
.7500E 01	.3200E 00	.8000E-02	.6797E-05	.2175E-05	.6006E-01	.5438E-07	.3969E-01
.7600E 01	.3206E 00	.8000E-02	.6341E-05	.2034E-05	.6027E-01	.5072E-07	.3969E-01
.7700E 01	.3216E 00	.8000E-02	.5914E-05	.1902E-05	.6046E-01	.4731E-07	.3970E-01
.7800E 01	.3224E 00	.8000E-02	.5516E-05	.1778E-05	.6065E-01	.4413E-07	.3970E-01
.7900E 01	.3232E 00	.8000E-02	.5144E-05	.1663E-05	.6082E-01	.4115E-07	.3971E-01
.8000E 01	.3240E 00	.1200E-01	.4737E-05	.1554E-05	.6098E-01	.5757E-07	.3971E-01
.8100E 01	.3252E 00	.1200E-01	.4473E-05	.1455E-05	.6113E-01	.5368E-07	.3972E-01
.8200E 01	.3264E 00	.1200E-01	.4171E-05	.1361E-05	.6127E-01	.5005E-07	.3972E-01
.8300E 01	.3276E 00	.1200E-01	.3888E-05	.1274E-05	.6140E-01	.4666E-07	.3973E-01
.8400E 01	.3288E 00	.1200E-01	.3625E-05	.1192E-05	.6153E-01	.4350E-07	.3973E-01
.8500E 01	.3300E 00	.2000E-01	.3379E-05	.1115E-05	.6164E-01	.6758E-07	.3974E-01
.8600E 01	.3320E 00	.2000E-01	.3150E-05	.1046E-05	.6175E-01	.6300E-07	.3974E-01
.8700E 01	.3340E 00	.2000E-01	.2936E-05	.9806E-06	.6185E-01	.5872E-07	.3975E-01
.8800E 01	.3360E 00	.2000E-01	.2736E-05	.9194E-06	.6195E-01	.5472E-07	.3975E-01
.8900E 01	.3380E 00	.2000E-01	.2550E-05	.8619E-06	.6203E-01	.5100E-07	.3976E-01
.9000E 01	.3400E 00	.2800E-01	.2376E-05	.8079E-06	.6212E-01	.6653E-07	.3977E-01
.9100E 01	.3428E 00	.2800E-01	.2214E-05	.7590E-06	.6220E-01	.6200E-07	.3977E-01
.9200E 01	.3456E 00	.2800E-01	.2063E-05	.7130E-06	.6227E-01	.5777E-07	.3978E-01
.9300E 01	.3484E 00	.2800E-01	.1922E-05	.6697E-06	.6234E-01	.5382E-07	.3978E-01
.9400E 01	.3512E 00	.2800E-01	.1791E-05	.6289E-06	.6240E-01	.5014E-07	.3979E-01
.9500E 01	.3540E 00	.3200E-01	.1568E-05	.5906E-06	.6246E-01	.5339E-07	.3979E-01
.9600E 01	.3572E 00	.3200E-01	.1554E-05	.5551E-06	.6252E-01	.4973E-07	.3980E-01
.9700E 01	.3604E 00	.3200E-01	.1445E-05	.5217E-06	.6258E-01	.4633E-07	.3980E-01
.9800E 01	.3636E 00	.3200E-01	.1346E-05	.4903E-06	.6263E-01	.4315E-07	.3981E-01
.9900E 01	.3668E 00	.3200E-01	.1256E-05	.4607E-06	.6267E-01	.4019E-07	.3981E-01
.1000E 02	.3700E 00	.2400E-01	.1170E-05	.4328E-06	.6272E-01	.2808E-07	.3982E-01
.1010E 02	.3724E 00	.2400E-01	.1089E-05	.4057E-06	.6276E-01	.2614E-07	.3982E-01
.1020E 02	.3748E 00	.2400E-01	.1014E-05	.3802E-06	.6280E-01	.2435E-07	.3982E-01
.1030E 02	.3772E 00	.2400E-01	.9447E-06	.3563E-06	.6284E-01	.2267E-07	.3982E-01
.1040E 02	.3796E 00	.2400E-01	.8747E-06	.3339E-06	.6287E-01	.2111E-07	.3983E-01
.1050E 02	.3820E 00	.6000E-02	.8191E-06	.3129E-06	.6290E-01	.4918E-08	.3983E-01
.1060E 02	.3826E 00	.6000E-02	.7627E-06	.2918E-06	.6293E-01	.4576E-08	.3983E-01
.1070E 02	.3832E 00	.6000E-02	.7101E-06	.2721E-06	.6296E-01	.4260E-08	.3983E-01
.1080E 02	.3838E 00	.6000E-02	.6611E-06	.2537E-06	.6299E-01	.3966E-08	.3983E-01
.1090E 02	.3844E 00	.6000E-02	.6154E-06	.2366E-06	.6301E-01	.3693E-08	.3983E-01

S-32(N,P)P-32  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.1100E 02	.3850E 00	-.1998E-02	.5729E-06	.2206E-06	.6304E-01	-.1145E-08	.3983E-01
.1110E 02	.3848E 00	-.2000E-02	.5533E-06	.2052E-06	.6306E-01	-.1067E-08	.3983E-01
.1120E 02	.3846E 00	-.2000E-02	.4965E-06	.1909E-06	.6308E-01	-.9929E-09	.3983E-01
.1130E 02	.3844E 00	-.2000E-02	.4621E-06	.1776E-06	.6309E-01	-.9242E-09	.3983E-01
.1140E 02	.3842E 00	-.2000E-02	.4301E-06	.1652E-06	.6311E-01	-.8602E-09	.3983E-01
.1150E 02	.3840E 00	-.3599E-01	.4003E-06	.1537E-06	.6313E-01	-.1441E-07	.3983E-01
.1150E 02	.3804E 00	-.3600E-01	.3726E-06	.1417E-06	.6314E-01	-.1341E-07	.3983E-01
.1170E 02	.3768E 00	-.3600E-01	.3466E-06	.1307E-06	.6316E-01	-.1248E-07	.3983E-01
.1180E 02	.3732E 00	-.3600E-01	.3227E-06	.1204E-06	.6317E-01	-.1162E-07	.3983E-01
.1190E 02	.3696E 00	-.3600E-01	.3003E-06	.1110E-06	.6318E-01	-.1081E-07	.3982E-01
.1200E 02	.3660E 00	-.7599E-01	.2795E-06	.1023E-06	.6319E-01	-.2123E-07	.3982E-01
.1210E 02	.3584E 00	-.7600E-01	.2600E-06	.9320E-07	.6320E-01	-.1976E-07	.3982E-01
.1220E 02	.3508E 00	-.7600E-01	.2420E-06	.8488E-07	.6321E-01	-.1839E-07	.3982E-01
.1230E 02	.3432E 00	-.7600E-01	.2251E-06	.7727E-07	.6322E-01	-.1711E-07	.3982E-01
.1240E 02	.3356E 00	-.7600E-01	.2095E-06	.7030E-07	.6322E-01	-.1592E-07	.3982E-01
.1250E 02	.3280E 00	-.4001E-01	.1949E-06	.6393E-07	.6323E-01	-.7799E-08	.3981E-01
.1260E 02	.3240E 00	-.4000E-01	.1813E-06	.5875E-07	.6324E-01	-.7254E-08	.3981E-01
.1270E 02	.3200E 00	-.4000E-01	.1687E-06	.5399E-07	.6324E-01	-.6749E-08	.3981E-01
.1280E 02	.3160E 00	-.4000E-01	.1570E-06	.4960E-07	.6325E-01	-.6278E-08	.3981E-01
.1290E 02	.3120E 00	-.4000E-01	.1460E-06	.4556E-07	.6325E-01	-.5841E-08	.3981E-01
.1300E 02	.3080E 00	-.5599E-01	.1358E-06	.4184E-07	.6326E-01	-.7606E-08	.3981E-01
.1310E 02	.3040E 00	-.5600E-01	.1264E-06	.3821E-07	.6326E-01	-.7076E-08	.3981E-01
.1320E 02	.2968E 00	-.5600E-01	.1175E-06	.3489E-07	.6327E-01	-.6582E-08	.3981E-01
.1330E 02	.2912E 00	-.5600E-01	.1093E-06	.3184E-07	.6327E-01	-.6123E-08	.3981E-01
.1340E 02	.2856E 00	-.5600E-01	.1017E-06	.2905E-07	.6327E-01	-.5695E-08	.3981E-01
.1350E 02	.2800E 00	-.5400E-01	.9455E-07	.2649E-07	.6327E-01	-.5108E-08	.3981E-01
.1360E 02	.2746E 00	-.5400E-01	.8798E-07	.2416E-07	.6328E-01	-.4751E-08	.3981E-01
.1370E 02	.2692E 00	-.5400E-01	.8183E-07	.2203E-07	.6328E-01	-.4419E-08	.3981E-01
.1380E 02	.2638E 00	-.5400E-01	.7611E-07	.2008E-07	.6329E-01	-.4110E-08	.3981E-01
.1390E 02	.2584E 00	-.5400E-01	.7076E-07	.1829E-07	.6328E-01	-.3822E-08	.3981E-01
.1400E 02	.2530E 00	-.5600E-01	.6583E-07	.1666E-07	.6329E-01	-.3666E-08	.3981E-01
.1410E 02	.2474E 00	-.5600E-01	.6122E-07	.1515E-07	.6329E-01	-.3428E-08	.3981E-01
.1420E 02	.2418E 00	-.5600E-01	.5693E-07	.1377E-07	.6329E-01	-.3188E-08	.3980E-01
.1430E 02	.2362E 00	-.5600E-01	.5284E-07	.1251E-07	.6329E-01	-.2965E-08	.3980E-01
.1440E 02	.2306E 00	-.5600E-01	.4923E-07	.1135E-07	.6329E-01	-.2757E-08	.3980E-01
.1450E 02	.2250E 00	-.3001E-01	.4578E-07	.1030E-07	.6329E-01	-.1374E-08	.3980E-01
.1460E 02	.2220E 00	-.3000E-01	.4257E-07	.9451E-08	.6329E-01	-.1277E-08	.3980E-01
.1470E 02	.2190E 00	-.3000E-01	.3929E-07	.8669E-08	.6329E-01	-.1188E-08	.3980E-01
.1480E 02	.2160E 00	-.3000E-01	.3681E-07	.7951E-08	.6329E-01	-.1104E-08	.3980E-01
.1490E 02	.2130E 00	-.3000E-01	.3422E-07	.7290E-08	.6330E-01	-.1027E-08	.3980E-01
.1500E 02	.2100E 00	-.4599E-01	.3182E-07	.6683E-08	.6330E-01	-.1464E-08	.3980E-01
.1510E 02	.2054E 00	-.4600E-01	.2959E-07	.6077E-08	.6330E-01	-.1361E-08	.3980E-01
.1520E 02	.2008E 00	-.4600E-01	.2751E-07	.5524E-08	.6330E-01	-.1265E-08	.3980E-01
.1530E 02	.1962E 00	-.4600E-01	.2556E-07	.5018E-08	.6330E-01	-.1176E-08	.3980E-01
.1540E 02	.1916E 00	-.4600E-01	.2378E-07	.4556E-08	.6330E-01	-.1094E-08	.3980E-01
.1550E 02	.1870E 00	-.4600E-01	.2211E-07	.4134E-08	.6330E-01	-.1017E-08	.3980E-01
.1560E 02	.1824E 00	-.4500E-01	.2055E-07	.3749E-08	.6330E-01	-.9453E-09	.3980E-01
.1570E 02	.1778E 00	-.4600E-01	.1911E-07	.3397E-08	.6330E-01	-.8768E-09	.3980E-01
.1580E 02	.1732E 00	-.4600E-01	.1776E-07	.3076E-08	.6330E-01	-.8170E-09	.3980E-01
.1590E 02	.1686E 00	-.4600E-01	.1651E-07	.2784E-08	.6330E-01	-.7595E-09	.3980E-01

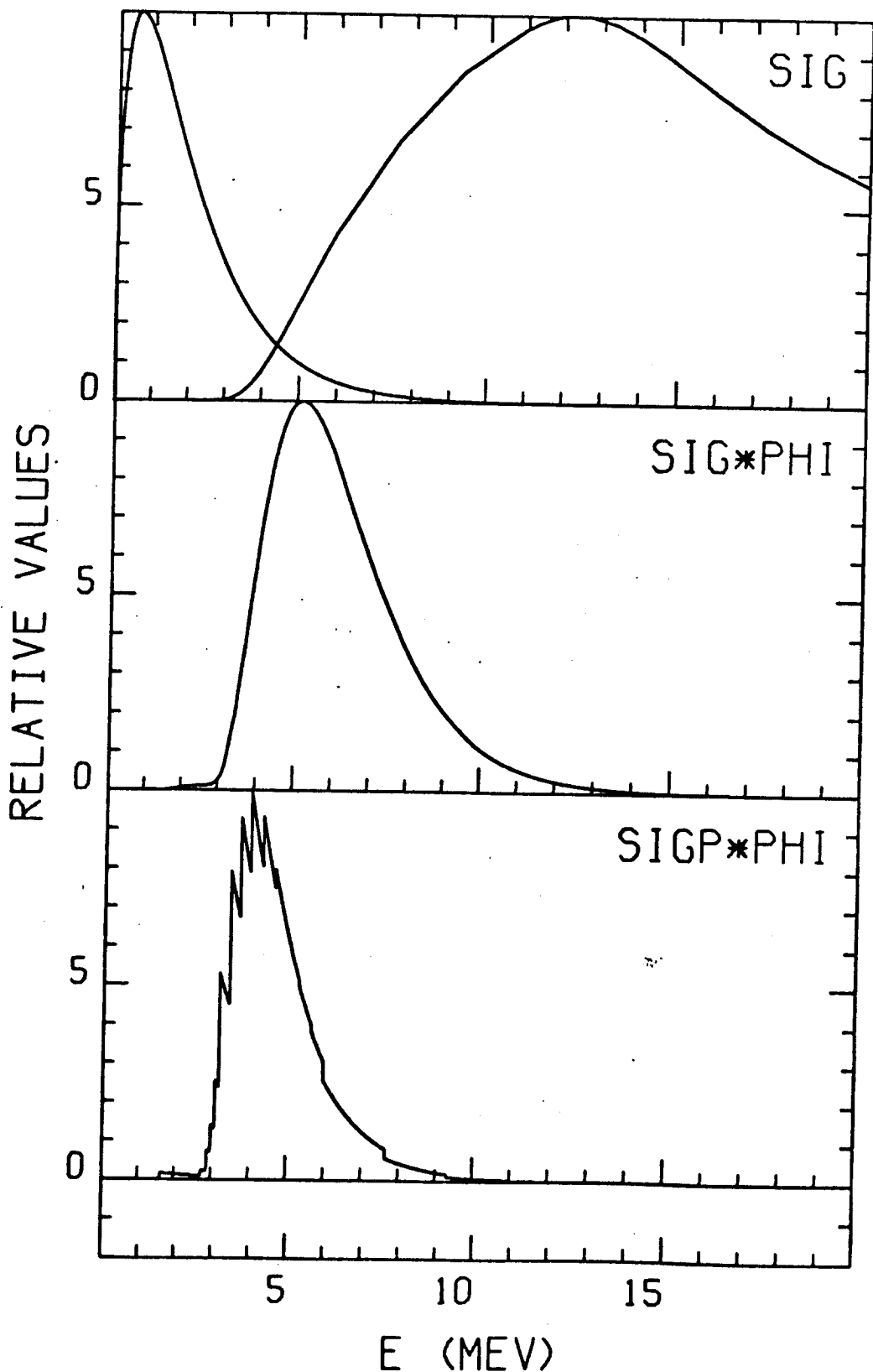
S-32(N,P)P-32  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1600E 02	.1640E 00	-.3701E-01	.1535E-07	.2517E-08	.6330E-01	-.5680E-09	.3980E-01
.1610E 02	.1603E 00	-.3700E-01	.1427E-07	.2287E-08	.6330E-01	-.5279E-09	.3980E-01
.1620E 02	.1566E 00	-.3700E-01	.1326E-07	.2077E-08	.6330E-01	-.4907E-09	.3930E-01
.1630E 02	.1529E 00	-.3700E-01	.1230E-07	.1885E-08	.6330E-01	-.4561E-09	.3980E-01
.1640E 02	.1492E 00	-.3700E-01	.1146E-07	.1710E-08	.6330E-01	-.4240E-09	.3900E-01
.1650E 02	.1455E 00	-.3700E-01	.1065E-07	.1550E-08	.6330E-01	-.3941E-09	.3960E-01
.1660E 02	.1418E 00	-.3700E-01	.9900E-08	.1404E-08	.6330E-01	-.3663E-09	.3980E-01
.1670E 02	.1381E 00	-.3700E-01	.9202E-08	.1271E-08	.6330E-01	-.3405E-09	.3980E-01
.1680E 02	.1344E 00	-.3700E-01	.8503E-08	.1149E-08	.6330E-01	-.3165E-09	.3980E-01
.1690E 02	.1307E 00	-.3700E-01	.7949E-08	.1039E-08	.6330E-01	-.2941E-09	.3980E-01
.1700E 02	.1270E 00	-.2601E-01	.7354E-08	.9383E-09	.6330E-01	-.1922E-09	.3980E-01
.1710E 02	.1244E 00	-.2600E-01	.6887E-08	.8542E-09	.6330E-01	-.1785E-09	.3980E-01
.1720E 02	.1218E 00	-.2600E-01	.6362E-08	.7773E-09	.6330E-01	-.1659E-09	.3980E-01
.1730E 02	.1192E 00	-.2600E-01	.5931E-08	.7070E-09	.6330E-01	-.1542E-09	.3980E-01
.1740E 02	.1166E 00	-.2600E-01	.5512E-08	.6427E-09	.6330E-01	-.1433E-09	.3980E-01
.1750E 02	.1140E 00	-.2600E-01	.5123E-08	.5840E-09	.6330E-01	-.1332E-09	.3980E-01
.1760E 02	.1114E 00	-.2600E-01	.4761E-08	.5303E-09	.6330E-01	-.1238E-09	.3980E-01
.1770E 02	.1088E 00	-.2600E-01	.4424E-08	.4813E-09	.6330E-01	-.1150E-09	.3980E-01
.1780E 02	.1062E 00	-.2600E-01	.4111E-08	.4366E-09	.6330E-01	-.1069E-09	.3980E-01
.1790E 02	.1036E 00	-.2600E-01	.3821E-08	.3958E-09	.6330E-01	-.9934E-10	.3980E-01
.1800E 02	.1010E 00	-.1401E-01	.3500E-08	.3586E-09	.6330E-01	-.4974E-10	.3980E-01
.1810E 02	.9960E-01	-.1400E-01	.3299E-08	.3286E-09	.6330E-01	-.4619E-10	.3980E-01
.1820E 02	.9820E-01	-.1400E-01	.3064E-08	.3011E-09	.6330E-01	-.4292E-10	.3980E-01
.1830E 02	.9680E-01	-.1400E-01	.2849E-08	.2758E-09	.6330E-01	-.3988E-10	.3980E-01
.1840E 02	.9540E-01	-.1400E-01	.2647E-08	.2525E-09	.6330E-01	-.3706E-10	.3980E-01
.1850E 02	.9400E-01	-.1400E-01	.2460E-08	.2312E-09	.6330E-01	-.3444E-10	.3980E-01
.1860E 02	.9260E-01	-.1400E-01	.2286E-08	.2116E-09	.6330E-01	-.3200E-10	.3980E-01
.1870E 02	.9120E-01	-.1400E-01	.2124E-08	.1937E-09	.6330E-01	-.2973E-10	.3980E-01
.1880E 02	.8980E-01	-.1400E-01	.1973E-08	.1772E-09	.6330E-01	-.2762E-10	.3980E-01
.1890E 02	.8840E-01	-.1400E-01	.1833E-08	.1621E-09	.6330E-01	-.2567E-10	.3980E-01
.1900E 02	.8700E-01	-.1000E-01	.1703E-08	.1482E-09	.6330E-01	-.1704E-10	.3980E-01
.1910E 02	.8600E-01	-.1000E-01	.1563E-08	.1361E-09	.6330E-01	-.1583E-10	.3980E-01
.1920E 02	.8500E-01	-.1000E-01	.1471E-08	.1250E-09	.6330E-01	-.1471E-10	.3980E-01
.1930E 02	.8400E-01	-.1000E-01	.1366E-08	.1148E-09	.6330E-01	-.1366E-10	.3980E-01
.1940E 02	.8300E-01	-.1000E-01	.1269E-08	.1054E-09	.6330E-01	-.1269E-10	.3980E-01
.1950E 02	.8200E-01	-.1000E-01	.1179E-08	.9670E-10	.6330E-01	-.1179E-10	.3980E-01
.1960E 02	.8100E-01	-.1000E-01	.1096E-08	.8875E-10	.6330E-01	-.1096E-10	.3980E-01
.1970E 02	.8000E-01	-.1000E-01	.1018E-08	.8143E-10	.6330E-01	-.1018E-10	.3980E-01
.1980E 02	.7900E-01	-.1000E-01	.9457E-09	.7471E-10	.6330E-01	-.9457E-11	.3980E-01
.1990E 02	.7800E-01	-.1000E-01	.8766E-09	.6853E-10	.6330E-01	-.8786E-11	.3980E-01

SPECTRUM AVERAGE CROSS SECTION = .6330E-01



TI-46 (N, P) SC-46  
U-235 FISSION SPECTRUM



TI-46(N,P)SC-46  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1700E 01	.1250E-04	.1766E-03	.2679E-03	.3349E-08	.1202E-06	.4784E-07	.3452E-05
.1800E 01	.3036E-04	.1766E-03	.2554E-03	.7755E-08	.6912E-06	.4562E-07	.6124E-05
.1900E 01	.4921E-04	.1766E-03	.2432E-03	.1173E-07	.1661E-05	.4343E-07	.1257E-04
.2000E 01	.6607E-04	.1766E-03	.2312E-03	.1528E-07	.3016E-05	.4129E-07	.1661E-04
.2100E 01	.8393E-04	.1766E-03	.2196E-03	.1843E-07	.4706E-05	.3921E-07	.2063E-04
.2200E 01	.1019E-03	.1766E-03	.2083E-03	.2120E-07	.6692E-05	.3719E-07	.2465E-04
.2300E 01	.1196E-03	.1766E-03	.1973E-03	.2361E-07	.8937E-05	.3524E-07	.2827E-04
.2400E 01	.1375E-03	.1766E-03	.1866E-03	.2568E-07	.1140E-04	.3336E-07	.3170E-04
.2500E 01	.1554E-03	.1766E-03	.1767E-03	.2745E-07	.1406E-04	.3155E-07	.3494E-04
.2600E 01	.1732E-03	.1766E-03	.1670E-03	.2892E-07	.1689E-04	.2961E-07	.3801E-04
.2700E 01	.1911E-03	.1766E-03	.1577E-03	.3013E-07	.1984E-04	.2815E-07	.4091E-04
.2800E 01	.2237E-03	.1766E-03	.1466E-03	.3328E-07	.2296E-04	.2704E-07	.4591E-04
.2900E 01	.2710E-03	.1657E-02	.1403E-03	.3803E-07	.2653E-04	.2325E-06	.5292E-04
.3000E 01	.4367E-03	.3256E-02	.1323E-03	.5775E-07	.3135E-04	.4306E-06	.7569E-04
.3100E 01	.7622E-03	.6277E-02	.1246E-03	.9496E-07	.3905E-04	.7821E-06	.1179E-03
.3200E 01	.1393E-02	.1365E-01	.1173E-03	.1630E-06	.5206E-04	.1624E-05	.1946E-03
.3300E 01	.2773E-02	.1365E-01	.1104E-03	.3063E-06	.7575E-04	.1529E-05	.3522E-03
.3400E 01	.4160E-02	.1365E-01	.1036E-03	.4319E-06	.1129E-03	.1439E-05	.5004E-03
.3500E 01	.5360E-02	.2424E-01	.9762E-04	.5813E-06	.1625E-03	.2367E-05	.6819E-03
.3600E 01	.8389E-02	.2424E-01	.9175E-04	.7693E-06	.2304E-03	.2224E-05	.9114E-03
.3700E 01	.1061E-01	.2424E-01	.8619E-04	.9317E-06	.3157E-03	.2090E-05	.1127E-02
.3800E 01	.1397E-01	.3348E-01	.8095E-04	.1131E-05	.4186E-03	.2710E-05	.1392E-02
.3900E 01	.1732E-01	.3348E-01	.7599E-04	.1316E-05	.5413E-03	.2545E-05	.1654E-02
.4000E 01	.2085E-01	.4239E-01	.7132E-04	.1487E-05	.6812E-03	.3023E-05	.1914E-02
.4100E 01	.2509E-01	.4239E-01	.6591E-04	.1679E-05	.8399E-03	.2836E-05	.2207E-02
.4200E 01	.2932E-01	.4239E-01	.6276E-04	.1840E-05	.1016E-02	.2660E-05	.2481E-02
.4300E 01	.3356E-01	.4239E-01	.5864E-04	.1975E-05	.1207E-02	.2494E-05	.2739E-02
.4400E 01	.3835E-01	.4927E-01	.5516E-04	.2116E-05	.1412E-02	.2718E-05	.3012E-02
.4500E 01	.4326E-01	.4927E-01	.5169E-04	.2237E-05	.1630E-02	.2547E-05	.3275E-02
.4600E 01	.4821E-01	.4927E-01	.4843E-04	.2335E-05	.1858E-02	.2386E-05	.3522E-02
.4700E 01	.5326E-01	.5246E-01	.4537E-04	.2416E-05	.2096E-02	.2380E-05	.3753E-02
.4800E 01	.5851E-01	.5246E-01	.4249E-04	.2486E-05	.2341E-02	.2229E-05	.3989E-02
.4900E 01	.6375E-01	.5246E-01	.3978E-04	.2536E-05	.2593E-02	.2087E-05	.4204E-02
.5000E 01	.6900E-01	.5246E-01	.3724E-04	.2569E-05	.2848E-02	.1954E-05	.4406E-02
.5100E 01	.7425E-01	.5246E-01	.3465E-04	.2588E-05	.3106E-02	.1829E-05	.4595E-02
.5200E 01	.7950E-01	.5248E-01	.3261E-04	.2592E-05	.3365E-02	.1711E-05	.4772E-02
.5300E 01	.8474E-01	.5246E-01	.3051E-04	.2585E-05	.3624E-02	.1601E-05	.4938E-02
.5400E 01	.8991E-01	.5123E-01	.2854E-04	.2566E-05	.3882E-02	.1462E-05	.5090E-02
.5500E 01	.9503E-01	.5123E-01	.2669E-04	.2536E-05	.4137E-02	.1367E-05	.5231E-02
.5600E 01	.1002E 00	.5123E-01	.2496E-04	.2499E-05	.4369E-02	.1278E-05	.5364E-02
.5700E 01	.1052E 00	.4929E-01	.2333E-04	.2455E-05	.4636E-02	.1150E-05	.5486E-02
.5800E 01	.1101E 00	.4929E-01	.2161E-04	.2402E-05	.4879E-02	.1075E-05	.5597E-02
.5900E 01	.1151E 00	.4929E-01	.2038E-04	.2346E-05	.5117E-02	.1005E-05	.5701E-02
.6000E 01	.1200E 00	.4153E-01	.1905E-04	.2286E-05	.5348E-02	.7912E-06	.5798E-02
.6100E 01	.1242E 00	.4153E-01	.1780E-04	.2210E-05	.5573E-02	.7392E-06	.5874E-02
.6200E 01	.1263E 00	.4153E-01	.1663E-04	.2134E-05	.5790E-02	.6906E-06	.5945E-02
.6300E 01	.1325E 00	.4153E-01	.1553E-04	.2053E-05	.6000E-02	.6451E-06	.6012E-02
.6400E 01	.1366E 00	.4153E-01	.1451E-04	.1982E-05	.6202E-02	.6026E-06	.6075E-02
.6500E 01	.1408E 00	.4153E-01	.1355E-04	.1907E-05	.6396E-02	.5627E-06	.6133E-02
.6600E 01	.1449E 00	.4153E-01	.1265E-04	.1834E-05	.6583E-02	.5255E-06	.6187E-02

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E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.6700E 01	.1491E 00	.4153E-01	.1161E-04	.1761E-05	.6763E-02	.4906E-06	.6238E-02
.6800E 01	.1532E 00	.4153E-01	.1103E-04	.1690E-05	.6935E-02	.4580E-06	.6285E-02
.6900E 01	.1574E 00	.4153E-01	.1029E-04	.1620E-05	.7101E-02	.4276E-06	.6330E-02
.7000E 01	.1615E 00	.4153E-01	.9609E-05	.1552E-05	.7259E-02	.3991E-06	.6371E-02
.7100E 01	.1657E 00	.4153E-01	.8968E-05	.1486E-05	.7411E-02	.3724E-06	.6410E-02
.7200E 01	.1698E 00	.4153E-01	.8369E-05	.1421E-05	.7556E-02	.3476E-06	.6446E-02
.7300E 01	.1740E 00	.4153E-01	.7809E-05	.1359E-05	.7695E-02	.3243E-06	.6479E-02
.7400E 01	.1781E 00	.4153E-01	.7266E-05	.1298E-05	.7828E-02	.3026E-06	.6510E-02
.7500E 01	.1823E 00	.4153E-01	.6797E-05	.1239E-05	.7955E-02	.2823E-06	.6540E-02
.7600E 01	.1864E 00	.4153E-01	.6341E-05	.1182E-05	.8076E-02	.2633E-06	.6567E-02
.7700E 01	.1902E 00	.2950E-01	.5914E-05	.1125E-05	.8191E-02	.1745E-06	.6590E-02
.7800E 01	.1932E 00	.2950E-01	.5516E-05	.1065E-05	.8301E-02	.1627E-06	.6607E-02
.7900E 01	.1961E 00	.2950E-01	.5144E-05	.1009E-05	.8405E-02	.1517E-06	.6622E-02
.8000E 01	.1991E 00	.2950E-01	.4797E-05	.9549E-06	.8503E-02	.1415E-06	.6637E-02
.8100E 01	.2020E 00	.2950E-01	.4473E-05	.9036E-06	.8596E-02	.1319E-06	.6651E-02
.8200E 01	.2050E 00	.2950E-01	.4171E-05	.8548E-06	.8683E-02	.1230E-06	.6663E-02
.8300E 01	.2079E 00	.2950E-01	.3883E-05	.8084E-06	.8767E-02	.1147E-06	.6675E-02
.8400E 01	.2109E 00	.2950E-01	.3625E-05	.7643E-06	.8845E-02	.1069E-06	.6686E-02
.8500E 01	.2138E 00	.2950E-01	.3379E-05	.7225E-06	.8919E-02	.9968E-07	.6697E-02
.8600E 01	.2167E 00	.2950E-01	.3150E-05	.6827E-06	.8990E-02	.9291E-07	.6706E-02
.8700E 01	.2197E 00	.2950E-01	.2936E-05	.6450E-06	.9056E-02	.8660E-07	.6715E-02
.8800E 01	.2226E 00	.2950E-01	.2736E-05	.6092E-06	.9119E-02	.8071E-07	.6724E-02
.8900E 01	.2256E 00	.2950E-01	.2550E-05	.5753E-06	.9178E-02	.7522E-07	.6731E-02
.9000E 01	.2285E 00	.2950E-01	.2376E-05	.5431E-06	.9234E-02	.7009E-07	.6739E-02
.9100E 01	.2315E 00	.2950E-01	.2214E-05	.5126E-06	.9287E-02	.6531E-07	.6746E-02
.9200E 01	.2344E 00	.2950E-01	.2063E-05	.4837E-06	.9336E-02	.6086E-07	.6752E-02
.9300E 01	.2374E 00	.2950E-01	.1922E-05	.4563E-06	.9383E-02	.5670E-07	.6758E-02
.9400E 01	.2396E 00	.1897E-01	.1791E-05	.4292E-06	.9428E-02	.5339E-07	.6762E-02
.9500E 01	.2415E 00	.1897E-01	.1663E-05	.4030E-06	.9469E-02	.5165E-07	.6765E-02
.9600E 01	.2434E 00	.1897E-01	.1554E-05	.3783E-06	.9508E-02	.2948E-07	.6768E-02
.9700E 01	.2453E 00	.1897E-01	.1446E-05	.3552E-06	.9545E-02	.2746E-07	.6771E-02
.9800E 01	.2472E 00	.1897E-01	.1348E-05	.3334E-06	.9579E-02	.2558E-07	.6774E-02
.9900E 01	.2491E 00	.1897E-01	.1256E-05	.3129E-06	.9612E-02	.2383E-07	.6776E-02
.1000E 02	.2510E 00	.1897E-01	.1170E-05	.2936E-06	.9642E-02	.2219E-07	.6778E-02
.1010E 02	.2529E 00	.1897E-01	.1089E-05	.2755E-06	.9670E-02	.2067E-07	.6781E-02
.1020E 02	.2548E 00	.1897E-01	.1014E-05	.2585E-06	.9697E-02	.1925E-07	.6783E-02
.1030E 02	.2567E 00	.1897E-01	.9447E-06	.2425E-06	.9722E-02	.1792E-07	.6784E-02
.1040E 02	.2586E 00	.1897E-01	.8797E-06	.2275E-06	.9745E-02	.1669E-07	.6786E-02
.1050E 02	.2605E 00	.1897E-01	.8191E-06	.2134E-06	.9767E-02	.1554E-07	.6788E-02
.1060E 02	.2624E 00	.1897E-01	.7627E-06	.2001E-06	.9788E-02	.1447E-07	.6789E-02
.1070E 02	.2643E 00	.1897E-01	.7101E-06	.1877E-06	.9808E-02	.1347E-07	.6791E-02
.1080E 02	.2662E 00	.1897E-01	.6611E-06	.1760E-06	.9826E-02	.1254E-07	.6792E-02
.1090E 02	.2681E 00	.1897E-01	.6154E-06	.1650E-06	.9843E-02	.1166E-07	.6793E-02
.1100E 02	.2700E 00	.1315E-01	.5729E-06	.1547E-06	.9859E-02	.7537E-08	.6794E-02
.1110E 02	.2713E 00	.1315E-01	.5333E-06	.1447E-06	.9874E-02	.7015E-08	.6795E-02
.1120E 02	.2726E 00	.1315E-01	.4955E-06	.1353E-06	.9888E-02	.6530E-08	.6796E-02
.1130E 02	.2739E 00	.1315E-01	.4621E-06	.1266E-06	.9901E-02	.6078E-08	.6796E-02
.1140E 02	.2751E 00	.1033E-01	.4301E-06	.1183E-06	.9913E-02	.4443E-08	.6797E-02
.1150E 02	.2761E 00	.1033E-01	.4003E-06	.1105E-06	.9924E-02	.4135E-08	.6797E-02
.1160E 02	.2771E 00	.1033E-01	.3726E-06	.1033E-06	.9935E-02	.3849E-08	.6798E-02

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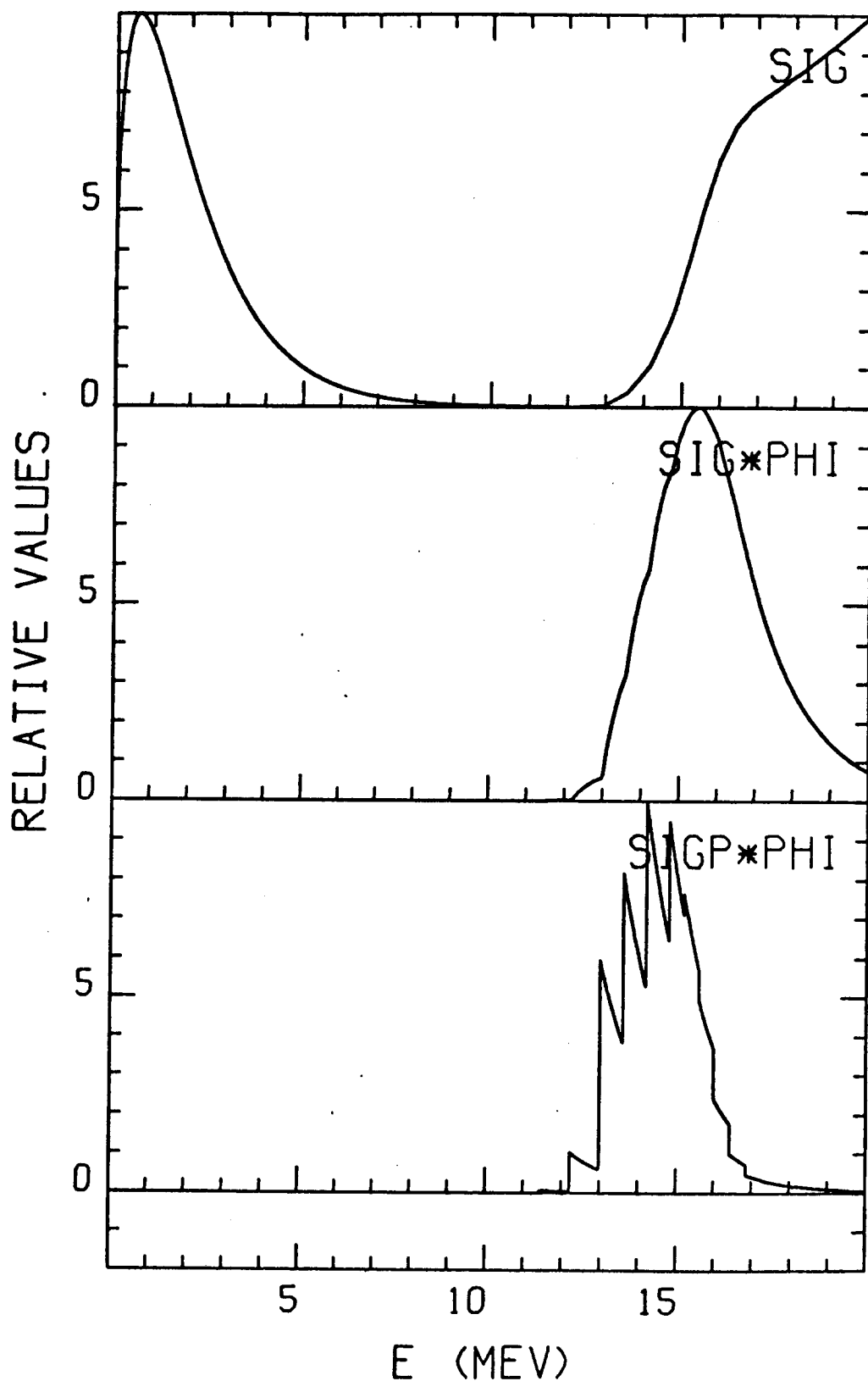
E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1170E 02	.2780E 00	.6517E-02	.3468E-06	.9641E-07	.9945E-02	.2260E-08	.6798E-02
.1180E 02	.2787E 00	.6517E-02	.3227E-06	.8994E-07	.9954E-02	.2103E-08	.6798E-02
.1190E 02	.2793E 00	.6517E-02	.3003E-06	.8389E-07	.9963E-02	.1957E-08	.6798E-02
.1200E 02	.2800E 00	-.2675E-03	.2795E-06	.7825E-07	.9971E-02	-.7476E-10	.6799E-02
.1210E 02	.2800E 00	-.2699E-03	.2600E-06	.7281E-07	.9979E-02	-.7018E-10	.6799E-02
.1220E 02	.2799E 00	-.2699E-03	.2420E-06	.6774E-07	.9986E-02	-.6530E-10	.6799E-02
.1230E 02	.2799E 00	-.2699E-03	.2251E-06	.6302E-07	.9992E-02	-.6076E-10	.6799E-02
.1240E 02	.2799E 00	-.2699E-03	.2095E-06	.5863E-07	.9998E-02	-.5653E-10	.6799E-02
.1250E 02	.2799E 00	-.2699E-03	.1949E-06	.5455E-07	.1000E-01	-.5260E-10	.6799E-02
.1260E 02	.2798E 00	-.2699E-03	.1813E-06	.5075E-07	.1001E-01	-.4894E-10	.6799E-02
.1270E 02	.2796E 00	-.8108E-02	.1687E-06	.4716E-07	.1001E-01	-.1368E-08	.6799E-02
.1280E 02	.2787E 00	-.8108E-02	.1570E-06	.4375E-07	.1002E-01	-.1273E-08	.6798E-02
.1290E 02	.2779E 00	-.8108E-02	.1460E-06	.4050E-07	.1002E-01	-.1184E-08	.6798E-02
.1300E 02	.2771E 00	-.8108E-02	.1358E-06	.3764E-07	.1003E-01	-.1101E-08	.6798E-02
.1310E 02	.2763E 00	-.8108E-02	.1264E-06	.3491E-07	.1003E-01	-.1025E-08	.6798E-02
.1320E 02	.2755E 00	-.8108E-02	.1175E-06	.3238E-07	.1003E-01	-.9530E-09	.6798E-02
.1330E 02	.2747E 00	-.8108E-02	.1093E-06	.3003E-07	.1004E-01	-.8865E-09	.6798E-02
.1340E 02	.2735E 00	-.1412E-01	.1017E-06	.2781E-07	.1004E-01	-.1436E-08	.6798E-02
.1350E 02	.2721E 00	-.1412E-01	.9457E-07	.2574E-07	.1004E-01	-.1336E-08	.6798E-02
.1360E 02	.2706E 00	-.1412E-01	.8790E-07	.2381E-07	.1004E-01	-.1243E-08	.6797E-02
.1370E 02	.2692E 00	-.1412E-01	.8183E-07	.2203E-07	.1005E-01	-.1156E-08	.6797E-02
.1380E 02	.2678E 00	-.1412E-01	.7611E-07	.2038E-07	.1005E-01	-.1075E-08	.6797E-02
.1390E 02	.2664E 00	-.1412E-01	.7073E-07	.1886E-07	.1005E-01	-.9997E-09	.6797E-02
.1400E 02	.2650E 00	-.1830E-01	.6583E-07	.1744E-07	.1005E-01	-.1205E-08	.6797E-02
.1410E 02	.2632E 00	-.1831E-01	.6122E-07	.1611E-07	.1005E-01	-.1121E-08	.6797E-02
.1420E 02	.2613E 00	-.1831E-01	.5693E-07	.1486E-07	.1006E-01	-.1042E-08	.6797E-02
.1430E 02	.2595E 00	-.1831E-01	.5294E-07	.1374E-07	.1006E-01	-.9692E-09	.6797E-02
.1440E 02	.2577E 00	-.1831E-01	.4923E-07	.1269E-07	.1006E-01	-.9013E-09	.6797E-02
.1450E 02	.2558E 00	-.1831E-01	.4570E-07	.1171E-07	.1006E-01	-.8381E-09	.6797E-02
.1460E 02	.2540E 00	-.1831E-01	.4237E-07	.1081E-07	.1006E-01	-.7793E-09	.6796E-02
.1470E 02	.2521E 00	-.2065E-01	.3959E-07	.9980E-08	.1006E-01	-.8173E-09	.6796E-02
.1480E 02	.2500E 00	-.2065E-01	.3681E-07	.9204E-08	.1006E-01	-.7599E-09	.6796E-02
.1490E 02	.2480E 00	-.2065E-01	.3422E-07	.8487E-08	.1006E-01	-.7066E-09	.6796E-02
.1500E 02	.2459E 00	-.2065E-01	.3182E-07	.7825E-08	.1007E-01	-.6570E-09	.6796E-02
.1510E 02	.2439E 00	-.2065E-01	.2959E-07	.7215E-08	.1007E-01	-.6108E-09	.6796E-02
.1520E 02	.2418E 00	-.2065E-01	.2751E-07	.6651E-08	.1007E-01	-.5679E-09	.6796E-02
.1530E 02	.2397E 00	-.2065E-01	.2558E-07	.6131E-08	.1007E-01	-.5280E-09	.6796E-02
.1540E 02	.2376E 00	-.2105E-01	.2376E-07	.5650E-08	.1007E-01	-.5005E-09	.6796E-02
.1550E 02	.2355E 00	-.2105E-01	.2211E-07	.5206E-08	.1007E-01	-.4653E-09	.6796E-02
.1560E 02	.2334E 00	-.2105E-01	.2055E-07	.4797E-08	.1007E-01	-.4326E-09	.6796E-02
.1570E 02	.2313E 00	-.2105E-01	.1911E-07	.4419E-08	.1007E-01	-.4022E-09	.6796E-02
.1580E 02	.2292E 00	-.2105E-01	.1776E-07	.4071E-08	.1007E-01	-.3739E-09	.6796E-02
.1590E 02	.2271E 00	-.2105E-01	.1651E-07	.3750E-08	.1007E-01	-.3475E-09	.6796E-02
.1600E 02	.2250E 00	-.1918E-01	.1535E-07	.3453E-08	.1007E-01	-.2944E-09	.6796E-02
.1610E 02	.2231E 00	-.1918E-01	.1427E-07	.3183E-08	.1007E-01	-.2737E-09	.6796E-02
.1620E 02	.2212E 00	-.1918E-01	.1326E-07	.2933E-08	.1007E-01	-.2544E-09	.6796E-02
.1630E 02	.2192E 00	-.1918E-01	.1233E-07	.2703E-08	.1007E-01	-.2363E-09	.6796E-02
.1640E 02	.2173E 00	-.1918E-01	.1146E-07	.2490E-08	.1007E-01	-.2198E-09	.6796E-02
.1650E 02	.2154E 00	-.1918E-01	.1065E-07	.2294E-08	.1007E-01	-.2043E-09	.6796E-02
.1660E 02	.2135E 00	-.1918E-01	.9900E-08	.2114E-08	.1007E-01	-.1899E-09	.6796E-02

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E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.1670E 02	.2116E 00	-.1918E-01	.9202E-06	.1947E-03	.1007E-01	-.1765E-09	.6796E-02
.1680E 02	.2097E 00	-.1918E-01	.8553E-08	.1793E-03	.1007E-01	-.1641E-09	.6796E-02
.1690E 02	.2077E 00	-.1918E-01	.7949E-08	.1651E-08	.1007E-01	-.1525E-09	.6795E-02
.1700E 02	.2058E 00	-.1918E-01	.7365E-08	.1521E-08	.1007E-01	-.1417E-09	.6795E-02
.1710E 02	.2039E 00	-.1918E-01	.6867E-08	.1400E-08	.1007E-01	-.1317E-09	.6795E-02
.1720E 02	.2020E 00	-.1918E-01	.6382E-08	.1289E-08	.1007E-01	-.1224E-09	.6795E-02
.1730E 02	.2001E 00	-.1918E-01	.5931E-08	.1187E-08	.1007E-01	-.1138E-09	.6795E-02
.1740E 02	.1983E 00	-.1624E-01	.5512E-08	.1093E-08	.1007E-01	-.8950E-10	.6795E-02
.1750E 02	.1967E 00	-.1624E-01	.5123E-08	.1008E-08	.1007E-01	-.8318E-10	.6795E-02
.1760E 02	.1951E 00	-.1624E-01	.4761E-08	.9288E-09	.1007E-01	-.7730E-10	.6795E-02
.1770E 02	.1935E 00	-.1624E-01	.4424E-08	.8559E-09	.1007E-01	-.7183E-10	.6795E-02
.1780E 02	.1918E 00	-.1624E-01	.4111E-08	.7887E-09	.1007E-01	-.6676E-10	.6795E-02
.1790E 02	.1902E 00	-.1624E-01	.3821E-08	.7268E-09	.1007E-01	-.6203E-10	.6795E-02
.1800E 02	.1886E 00	-.1624E-01	.3550E-08	.6696E-09	.1007E-01	-.5765E-10	.6795E-02
.1810E 02	.1870E 00	-.1624E-01	.3299E-08	.6169E-09	.1007E-01	-.5357E-10	.6795E-02
.1820E 02	.1854E 00	-.1624E-01	.3066E-08	.5682E-09	.1007E-01	-.4978E-10	.6795E-02
.1830E 02	.1837E 00	-.1624E-01	.2849E-08	.5234E-09	.1007E-01	-.4626E-10	.6795E-02
.1840E 02	.1821E 00	-.1624E-01	.2647E-08	.4821E-09	.1007E-01	-.4293E-10	.6795E-02
.1850E 02	.1805E 00	-.1624E-01	.2460E-08	.4439E-09	.1007E-01	-.3994E-10	.6795E-02
.1860E 02	.1789E 00	-.1624E-01	.2286E-08	.4088E-09	.1007E-01	-.3711E-10	.6795E-02
.1870E 02	.1773E 00	-.1333E-01	.2124E-08	.3766E-09	.1007E-01	-.2831E-10	.6795E-02
.1880E 02	.1760E 00	-.1333E-01	.1973E-08	.3473E-09	.1007E-01	-.2630E-10	.6795E-02
.1890E 02	.1747E 00	-.1333E-01	.1833E-08	.3202E-09	.1007E-01	-.2444E-10	.6795E-02
.1900E 02	.1733E 00	-.1333E-01	.1703E-08	.2953E-09	.1007E-01	-.2271E-10	.6795E-02
.1910E 02	.1720E 00	-.1333E-01	.1583E-08	.2722E-09	.1007E-01	-.2110E-10	.6795E-02
.1920E 02	.1707E 00	-.1333E-01	.1471E-08	.2510E-09	.1007E-01	-.1960E-10	.6795E-02
.1930E 02	.1693E 00	-.1333E-01	.1366E-08	.2313E-09	.1007E-01	-.1821E-10	.6795E-02
.1940E 02	.1680E 00	-.1333E-01	.1269E-08	.2132E-09	.1007E-01	-.1692E-10	.6795E-02
.1950E 02	.1667E 00	-.1333E-01	.1179E-08	.1966E-09	.1007E-01	-.1572E-10	.6795E-02
.1960E 02	.1653E 00	-.1333E-01	.1095E-08	.1811E-09	.1007E-01	-.1461E-10	.6795E-02
.1970E 02	.1640E 00	-.1333E-01	.1018E-08	.1669E-09	.1007E-01	-.1357E-10	.6795E-02
.1980E 02	.1627E 00	-.1333E-01	.9457E-09	.1538E-09	.1007E-01	-.1261E-10	.6795E-02
.1990E 02	.1613E 00	-.1333E-01	.8788E-09	.1417E-09	.1007E-01	-.1171E-10	.6795E-02

SPECTRUM AVERAGE CROSS SECTION = .1007E-01

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E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.1070E 02	.2975E-08	.1438E-06	.7101E-06	.2113E-14	.2228E-13	.1056E-12	.2234E-11
.1080E 02	.1785E-07	.1488E-06	.6611E-06	.1180E-13	.7347E-12	.9835E-13	.1243E-10
.1090E 02	.3273E-07	.1488E-06	.6134E-06	.2014E-13	.2347E-11	.9156E-13	.2191E-10
.1100E 02	.4761E-07	.1488E-06	.5729E-06	.2728E-13	.4731E-11	.8524E-13	.3075E-10
.1110E 02	.6248E-07	.1488E-06	.5333E-06	.3332E-13	.7772E-11	.7934E-13	.3897E-10
.1120E 02	.7736E-07	.1438E-06	.4965E-06	.3841E-13	.1137E-10	.7386E-13	.4662E-10
.1130E 02	.9224E-07	.1438E-06	.4621E-06	.4262E-13	.1543E-10	.6875E-13	.5375E-10
.1140E 02	.1071E-06	.1488E-06	.4301E-06	.4607E-13	.1987E-10	.6399E-13	.6038E-10
.1150E 02	.1639E-06	.3667E-04	.4003E-06	.7360E-12	.4130E-10	.1468E-10	.7804E-09
.1160E 02	.5506E-06	.3667E-04	.3725E-06	.2051E-11	.1930E-09	.1366E-10	.2196E-08
.1170E 02	.9173E-06	.3667E-04	.3483E-06	.3181E-11	.4466E-09	.1272E-10	.3514E-08
.1180E 02	.1284E-04	.3667E-04	.3227E-06	.4144E-11	.8146E-09	.1183E-10	.4741E-08
.1190E 02	.1651E-04	.3667E-04	.3003E-06	.4957E-11	.1271E-08	.1101E-10	.5883E-08
.1200E 02	.2018E-04	.3667E-04	.2795E-06	.5638E-11	.1902E-08	.1025E-10	.6945E-08
.1210E 02	.2384E-04	.3667E-04	.2600E-06	.6200E-11	.2396E-08	.9537E-11	.7933E-08
.1220E 02	.2751E-04	.3667E-04	.2420E-06	.6657E-11	.3039E-08	.8874E-11	.8853E-08
.1230E 02	.3104E-03	.9981E-03	.2251E-06	.2282E-10	.4319E-08	.2247E-09	.2615E-07
.1240E 02	.2012E-03	.9981E-03	.2095E-06	.4214E-10	.7601E-08	.2091E-09	.4783E-07
.1250E 02	.3010E-03	.9981E-03	.1949E-06	.5866E-10	.1267E-07	.1945E-09	.6799E-07
.1260E 02	.4008E-03	.9981E-03	.1813E-06	.7268E-10	.1927E-07	.1810E-09	.8675E-07
.1270E 02	.5006E-03	.9981E-03	.1557E-06	.8445E-10	.2715E-07	.1684E-09	.1042E-06
.1280E 02	.6004E-03	.9981E-03	.1570E-06	.9424E-10	.3610E-07	.1567E-09	.1204E-06
.1290E 02	.7002E-03	.9981E-03	.1460E-06	.1022E-09	.4594E-07	.1457E-09	.1356E-06
.1300E 02	.8000E-03	.9870E-02	.1350E-06	.1087E-09	.5650E-07	.1341E-08	.1508E-06
.1310E 02	.1787E-02	.9874E-02	.1264E-06	.2259E-09	.7344E-07	.1248E-08	.2802E-06
.1320E 02	.2775E-02	.9874E-02	.1175E-06	.3262E-09	.1612E-06	.1151E-08	.4005E-06
.1330E 02	.3762E-02	.9874E-02	.1093E-06	.4113E-09	.1383E-06	.1080E-08	.5124E-06
.1340E 02	.4750E-02	.9874E-02	.1017E-06	.4830E-09	.1831E-06	.1004E-08	.6165E-06
.1350E 02	.5737E-02	.9874E-02	.9459E-07	.5427E-09	.2345E-06	.9340E-09	.7133E-06
.1360E 02	.6724E-02	.2090E-01	.8793E-07	.5916E-09	.2914E-06	.1838E-08	.8044E-06
.1370E 02	.8815E-02	.2090E-01	.8183E-07	.7213E-09	.3573E-06	.1710E-08	.9817E-06
.1380E 02	.1090E-01	.2090E-01	.7611E-07	.8299E-09	.4350E-06	.1591E-08	.1147E-05
.1390E 02	.1299E-01	.2090E-01	.7075E-07	.9198E-09	.5227E-06	.1479E-08	.1300E-05
.1400E 02	.1508E-01	.2090E-01	.6503E-07	.9930E-09	.6185E-06	.1376E-08	.1443E-05
.1410E 02	.1717E-01	.2090E-01	.6122E-07	.1051E-08	.7209E-06	.1280E-08	.1575E-05
.1420E 02	.1925E-01	.3955E-01	.5693E-07	.1097E-08	.8284E-06	.2252E-08	.1700E-05
.1430E 02	.2322E-01	.3956E-01	.5294E-07	.1229E-08	.9450E-06	.2094E-08	.1917E-05
.1440E 02	.2718E-01	.3956E-01	.4923E-07	.1338E-08	.1074E-05	.1948E-08	.2119E-05
.1450E 02	.3113E-01	.3956E-01	.4573E-07	.1425E-08	.1212E-05	.1811E-08	.2307E-05
.1460E 02	.3509E-01	.3956E-01	.4257E-07	.1494E-08	.1358E-05	.1684E-08	.2481E-05
.1470E 02	.3904E-01	.3950E-01	.3959E-07	.1546E-08	.1510E-05	.1566E-08	.2644E-05
.1480E 02	.4300E-01	.5693E-01	.3631E-07	.1583E-08	.1667E-05	.2136E-08	.2795E-05
.1490E 02	.4680E-01	.5604E-01	.3422E-07	.1670E-08	.1830E-05	.1986E-08	.3001E-05
.1500E 02	.5461E-01	.5604E-01	.3182E-07	.1738E-08	.2000E-05	.1847E-08	.3193E-05
.1510E 02	.6041E-01	.5304E-01	.2959E-07	.1787E-08	.2177E-05	.1717E-08	.3371E-05
.1520E 02	.6622E-01	.6264E-01	.2751E-07	.1822E-08	.2357E-05	.1723E-08	.3537E-05
.1530E 02	.7248E-01	.6264E-01	.2558E-07	.1854E-08	.2541E-05	.1602E-08	.3703E-05
.1540E 02	.7875E-01	.6264E-01	.2378E-07	.1872E-08	.2728E-05	.1469E-08	.3857E-05
.1550E 02	.8501E-01	.6264E-01	.2211E-07	.1879E-08	.2915E-05	.1385E-08	.4001E-05
.1560E 02	.9127E-01	.5432E-01	.2055E-07	.1876E-08	.3103E-05	.1116E-08	.4134E-05

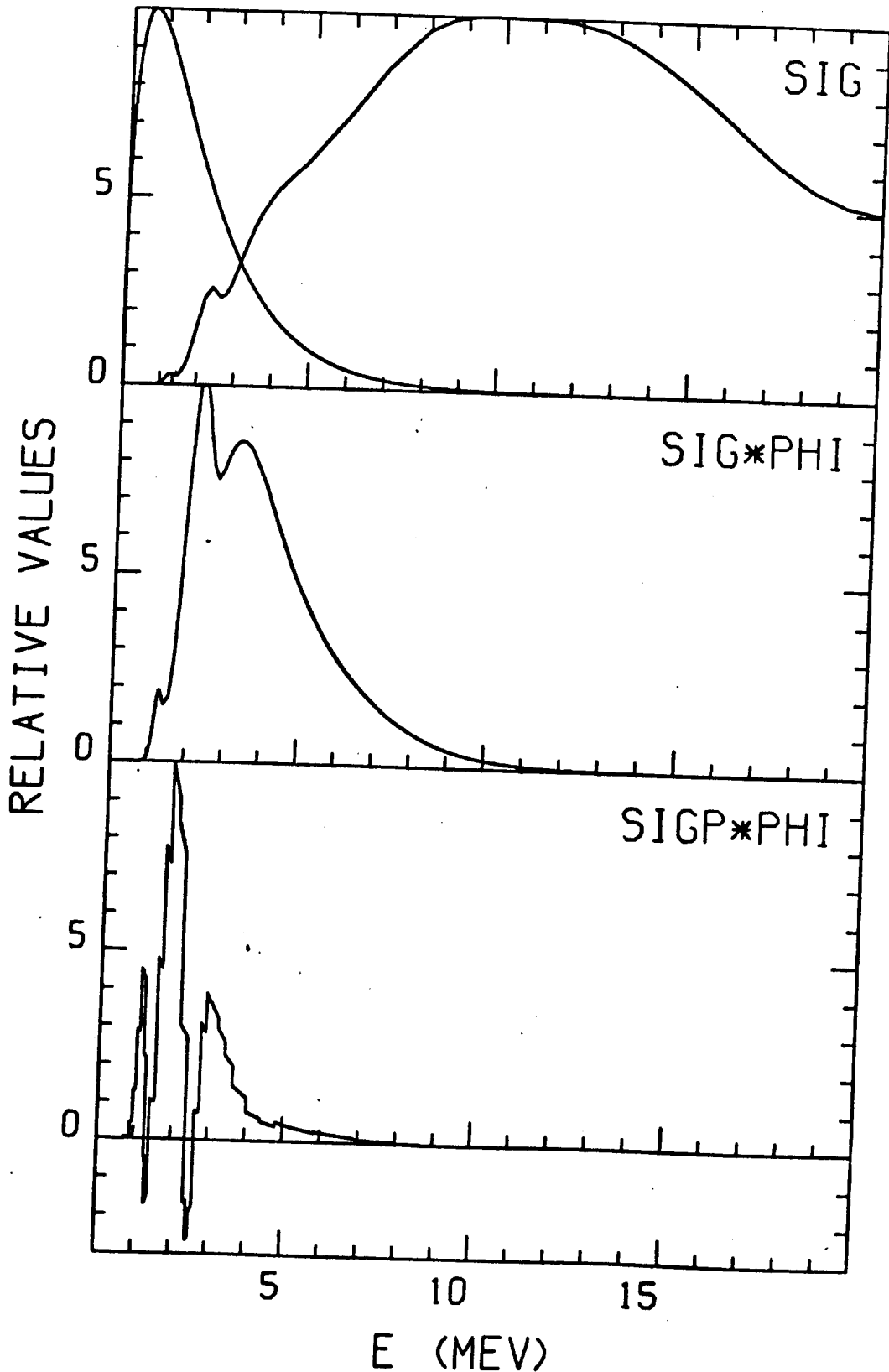
TJ-47(N,N-P)SC-46  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1570E 02	.9671E-01	.5431E-01	.1911E-07	.1848E-08	.3289E-05	.1038E-08	.4242E-05
.1580E 02	.1021E 00	.5431E-01	.1776E-07	.1814E-08	.3472E-05	.9647E-09	.4342E-05
.1590E 02	.1076E 00	.5431E-01	.1651E-07	.1776E-08	.3652E-05	.8968E-09	.4435E-05
.1600E 02	.1130E 00	.3557E-01	.1535E-07	.1734E-08	.3827E-05	.5475E-09	.4521E-05
.1610E 02	.1166E 00	.3566E-01	.1427E-07	.1663E-08	.3997E-05	.5087E-09	.4574E-05
.1620E 02	.1201E 00	.3566E-01	.1326E-07	.1593E-08	.4160E-05	.4729E-09	.4623E-05
.1630E 02	.1237E 00	.3566E-01	.1233E-07	.1525E-08	.4316E-05	.4396E-09	.4668E-05
.1640E 02	.1273E 00	.3566E-01	.1145E-07	.1458E-08	.4465E-05	.4086E-09	.4711E-05
.1650E 02	.1298E 00	.2044E-01	.1065E-07	.1383E-08	.4607E-05	.2177E-09	.4739E-05
.1660E 02	.1319E 00	.2044E-01	.9900E-08	.1305E-08	.4742E-05	.2023E-09	.4760E-05
.1670E 02	.1339E 00	.2044E-01	.9202E-08	.1232E-08	.4868E-05	.1881E-09	.4779E-05
.1680E 02	.1359E 00	.2044E-01	.8533E-08	.1163E-08	.4988E-05	.1748E-09	.4797E-05
.1690E 02	.1377E 00	.1314E-01	.7949E-08	.1095E-08	.5101E-05	.1045E-09	.4812E-05
.1700E 02	.1391E 00	.1314E-01	.7338E-08	.1027E-08	.5207E-05	.9709E-10	.4822E-05
.1710E 02	.1404E 00	.1314E-01	.6867E-08	.9639E-09	.5306E-05	.9023E-10	.4832E-05
.1720E 02	.1417E 00	.1314E-01	.6382E-08	.9042E-09	.5400E-05	.8386E-10	.4840E-05
.1730E 02	.1430E 00	.1262E-01	.5931E-08	.8481E-09	.5487E-05	.7487E-10	.4848E-05
.1740E 02	.1443E 00	.1262E-01	.5512E-08	.7952E-09	.5569E-05	.6958E-10	.4856E-05
.1750E 02	.1455E 00	.1262E-01	.5123E-08	.7455E-09	.5646E-05	.6466E-10	.4862E-05
.1760E 02	.1468E 00	.1262E-01	.4761E-08	.6988E-09	.5719E-05	.6009E-10	.4869E-05
.1770E 02	.1480E 00	.1262E-01	.4424E-08	.6550E-09	.5786E-05	.5584E-10	.4874E-05
.1780E 02	.1493E 00	.1262E-01	.4111E-08	.6139E-09	.5850E-05	.5189E-10	.4880E-05
.1790E 02	.1506E 00	.1262E-01	.3821E-08	.5753E-09	.5909E-05	.4822E-10	.4885E-05
.1800E 02	.1518E 00	.1262E-01	.3550E-08	.5391E-09	.5965E-05	.4481E-10	.4899E-05
.1810E 02	.1531E 00	.1262E-01	.3299E-08	.5051E-09	.6017E-05	.4164E-10	.4894E-05
.1820E 02	.1544E 00	.1370E-01	.3066E-08	.4732E-09	.6066E-05	.4200E-10	.4895E-05
.1830E 02	.1557E 00	.1370E-01	.2849E-08	.4436E-09	.6112E-05	.3903E-10	.4902E-05
.1840E 02	.1571E 00	.1370E-01	.2647E-08	.4159E-09	.6155E-05	.3627E-10	.4906E-05
.1850E 02	.1585E 00	.1370E-01	.2460E-08	.3898E-09	.6195E-05	.3370E-10	.4909E-05
.1860E 02	.1598E 00	.1370E-01	.2286E-08	.3653E-09	.6233E-05	.3131E-10	.4912E-05
.1870E 02	.1612E 00	.1370E-01	.2124E-08	.3424E-09	.6268E-05	.2909E-10	.4915E-05
.1880E 02	.1626E 00	.1370E-01	.1973E-08	.3208E-09	.6301E-05	.2703E-10	.4918E-05
.1890E 02	.1639E 00	.1370E-01	.1833E-08	.3006E-09	.6332E-05	.2512E-10	.4921E-05
.1900E 02	.1653E 00	.1370E-01	.1703E-08	.2816E-09	.6361E-05	.2334E-10	.4923E-05
.1910E 02	.1667E 00	.1479E-01	.1583E-08	.2638E-09	.6388E-05	.2341E-10	.4925E-05
.1920E 02	.1682E 00	.1479E-01	.1471E-08	.2473E-09	.6414E-05	.2175E-10	.4928E-05
.1930E 02	.1696E 00	.1479E-01	.1366E-08	.2318E-09	.6438E-05	.2021E-10	.4930E-05
.1940E 02	.1711E 00	.1479E-01	.1259E-08	.2172E-09	.6460E-05	.1877E-10	.4932E-05
.1950E 02	.1726E 00	.1479E-01	.1179E-08	.2036E-09	.6481E-05	.1744E-10	.4934E-05
.1960E 02	.1741E 00	.1479E-01	.1096E-08	.1907E-09	.6501E-05	.1620E-10	.4935E-05
.1970E 02	.1756E 00	.1479E-01	.1016E-08	.1787E-09	.6520E-05	.1505E-10	.4937E-05
.1980E 02	.1770E 00	.1479E-01	.9457E-09	.1674E-09	.6537E-05	.1399E-10	.4938E-05
.1990E 02	.1785E 00	.1479E-01	.8756E-09	.1568E-09	.6553E-05	.1299E-10	.4940E-05

SPECTRUM AVERAGE CROSS SECTION = .6566E-05



TI-47 (N, P) SC-47  
U-235 FISSION SPECTRUM



T1-4/(N,P)SC-47  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.6000E 00	.7246E-09	.7246E-06	.3678E-03	.2665E-12	.1341E-10	.2665E-11	.2675E-09
.7000E 00	.5646E-09	.9413E-05	.3661E-03	.2152E-09	.6420E-08	.3465E-08	.2160E-06
.8000E 00	.5387E-05	.1703E-03	.3647E-03	.1964E-08	.6327E-07	.6210E-07	.2033E-05
.9000E 00	.2242E-04	.1703E-03	.3584E-03	.8035E-08	.5683E-06	.6104E-07	.8193E-05
.1000E 01	.2027E-03	.4621E-02	.3501E-03	.7098E-07	.3628E-05	.1616E-05	.7344E-04
.1100E 01	.9078E-03	.1641E-01	.3403E-03	.3089E-06	.2043E-04	.3541E-05	.3182E-03
.1200E 01	.2374E-02	.1624E-01	.3294E-03	.7819E-06	.7338E-04	.5349E-05	.8104E-03
.1300E 01	.3614E-02	.8563E-02	.3177E-03	.1148E-05	.1734E-03	.2720E-05	.1210E-02
.1400E 01	.3291E-02	.6375E-02	.3055E-03	.1005E-05	.2443E-03	.1948E-05	.1106E-02
.1500E 01	.3402E-02	.4312E-02	.2930E-03	.9969E-06	.3811E-03	.1264E-05	.1141E-02
.1600E 01	.4492E-02	.2079E-01	.2805E-03	.1260E-05	.4886E-03	.5830E-05	.1456E-02
.1700E 01	.6720E-02	.3567E-01	.2679E-03	.1800E-05	.6405E-03	.9555E-05	.2070E-02
.1800E 01	.1029E-01	.3567E-01	.2554E-03	.2628E-05	.8631E-03	.9111E-05	.3003E-02
.1900E 01	.1491E-01	.4662E-01	.2432E-03	.3625E-05	.1174E-02	.1187E-04	.4156E-02
.2000E 01	.1979E-01	.4662E-01	.2312E-03	.4576E-05	.1586E-02	.1129E-04	.5314E-02
.2100E 01	.2440E-01	.4543E-01	.2190E-03	.5357E-05	.2084E-02	.9976E-05	.6352E-02
.2200E 01	.2894E-01	.4543E-01	.2063E-03	.6026E-05	.2655E-02	.9462E-05	.7324E-02
.2300E 01	.3131E-01	.1224E-01	.1973E-03	.6179E-05	.3270E-02	.3600E-05	.7801E-02
.2400E 01	.3314E-01	.1624E-01	.1805E-03	.6189E-05	.3839E-02	.3408E-05	.8151E-02
.2500E 01	.3259E-01	.1842E-01	.1767E-03	.5758E-05	.4490E-02	.3254E-05	.8043E-02
.2600E 01	.3088E-01	.1360E-01	.1670E-03	.5156E-05	.5034E-02	.2270E-05	.7754E-02
.2700E 01	.3050E-01	.5949E-02	.1577E-03	.4808E-05	.5528E-02	.9360E-06	.7693E-02
.2800E 01	.3142E-01	.2536E-01	.1438E-03	.4674E-05	.6000E-02	.3773E-05	.7636E-02
.2900E 01	.3395E-01	.2536E-01	.1403E-03	.4764E-05	.6472E-02	.3558E-05	.8202E-02
.3000E 01	.3727E-01	.3469E-01	.1323E-03	.4929E-05	.6957E-02	.4588E-05	.8654E-02
.3100E 01	.4075E-01	.3510E-01	.1246E-03	.5077E-05	.7457E-02	.4372E-05	.9102E-02
.3200E 01	.4426E-01	.3510E-01	.1173E-03	.5192E-05	.7971E-02	.4117E-05	.9526E-02
.3300E 01	.4764E-01	.3231E-01	.1104E-03	.5259E-05	.8494E-02	.3566E-05	.9911E-02
.3400E 01	.5087E-01	.3231E-01	.1030E-03	.5282E-05	.9021E-02	.3354E-05	.1026E-01
.3500E 01	.5392E-01	.2801E-01	.9762E-04	.5264E-05	.9549E-02	.2734E-05	.1056E-01
.3600E 01	.5672E-01	.2601E-01	.9175E-04	.5204E-05	.1007E-01	.2570E-05	.1083E-01
.3700E 01	.5922E-01	.2649E-01	.8619E-04	.5104E-05	.1059E-01	.1766E-05	.1105E-01
.3800E 01	.6127E-01	.2049E-01	.8095E-04	.4960E-05	.1109E-01	.1659E-05	.1122E-01
.3900E 01	.6332E-01	.2649E-01	.7599E-04	.4812E-05	.1158E-01	.1557E-05	.1135E-01
.4000E 01	.6537E-01	.2649E-01	.7132E-04	.4662E-05	.1205E-01	.1461E-05	.1153E-01
.4100E 01	.6709E-01	.1392E-01	.6691E-04	.4489E-05	.1251E-01	.9313E-06	.1165E-01
.4200E 01	.6848E-01	.1392E-01	.6276E-04	.4298E-05	.1295E-01	.8734E-06	.1174E-01
.4300E 01	.6987E-01	.1392E-01	.5804E-04	.4112E-05	.1337E-01	.8190E-06	.1183E-01
.4400E 01	.7126E-01	.1392E-01	.5516E-04	.3931E-05	.1377E-01	.7677E-06	.1191E-01
.4500E 01	.7254E-01	.1200E-01	.5169E-04	.3750E-05	.1416E-01	.6203E-06	.1197E-01
.4600E 01	.7374E-01	.1200E-01	.4843E-04	.3571E-05	.1452E-01	.5812E-06	.1203E-01
.4700E 01	.7494E-01	.1200E-01	.4537E-04	.3400E-05	.1487E-01	.5444E-06	.1209E-01
.4800E 01	.7614E-01	.1200E-01	.4249E-04	.3235E-05	.1523E-01	.5096E-06	.1214E-01
.4900E 01	.7757E-01	.1533E-01	.3973E-04	.3086E-05	.1552E-01	.6100E-06	.1220E-01
.5000E 01	.7911E-01	.1533E-01	.3724E-04	.2946E-05	.1582E-01	.5710E-06	.1226E-01
.5100E 01	.8064E-01	.1533E-01	.3485E-04	.2810E-05	.1611E-01	.5344E-06	.1232E-01
.5200E 01	.8217E-01	.1533E-01	.3261E-04	.2680E-05	.1638E-01	.5001E-06	.1237E-01
.5300E 01	.8371E-01	.1533E-01	.3051E-04	.2554E-05	.1664E-01	.4678E-06	.1242E-01
.5400E 01	.8524E-01	.1533E-01	.2854E-04	.2433E-05	.1689E-01	.4376E-06	.1246E-01
.5500E 01	.8677E-01	.1533E-01	.2669E-04	.2316E-05	.1713E-01	.4093E-06	.1250E-01

TI-47(N,P)SC-47  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.5600E 01	.8631E-01	.1533E-01	.2496E-04	.2204E-05	.1736E-01	.3827E-06	.1254E-01
.5700E 01	.8984E-01	.1533E-01	.2333E-04	.2096E-05	.1757E-01	.3578E-06	.1256E-01
.5800E 01	.9137E-01	.1533E-01	.2151E-04	.1993E-05	.1778E-01	.3344E-06	.1261E-01
.5900E 01	.9293E-01	.1533E-01	.2036E-04	.1894E-05	.1797E-01	.3451E-06	.1265E-01
.6000E 01	.9462E-01	.1533E-01	.1905E-04	.1803E-05	.1816E-01	.3225E-06	.1266E-01
.6100E 01	.9631E-01	.1533E-01	.1763E-04	.1714E-05	.1833E-01	.3013E-06	.1271E-01
.6200E 01	.9801E-01	.1533E-01	.1663E-04	.1630E-05	.1850E-01	.2815E-06	.1274E-01
.6300E 01	.9970E-01	.1533E-01	.1553E-04	.1549E-05	.1866E-01	.2630E-06	.1277E-01
.6400E 01	.1014E 00	.1533E-01	.1451E-04	.1471E-05	.1881E-01	.2456E-06	.1279E-01
.6500E 01	.1031E 00	.1533E-01	.1355E-04	.1397E-05	.1895E-01	.2294E-06	.1282E-01
.6600E 01	.1048E 00	.1533E-01	.1265E-04	.1326E-05	.1909E-01	.2142E-06	.1284E-01
.6700E 01	.1065E 00	.1533E-01	.1161E-04	.1258E-05	.1922E-01	.2000E-06	.1286E-01
.6800E 01	.1082E 00	.1533E-01	.1103E-04	.1193E-05	.1934E-01	.1867E-06	.1288E-01
.6900E 01	.1099E 00	.1533E-01	.1029E-04	.1131E-05	.1946E-01	.1743E-06	.1290E-01
.7000E 01	.1113E 00	.1269E-01	.9609E-05	.1070E-05	.1957E-01	.1619E-06	.1291E-01
.7100E 01	.1126E 00	.1269E-01	.8966E-05	.1010E-05	.1967E-01	.1518E-06	.1292E-01
.7200E 01	.1138E 00	.1269E-01	.8369E-05	.9528E-06	.1977E-01	.1462E-06	.1293E-01
.7300E 01	.1151E 00	.1269E-01	.7809E-05	.8989E-06	.1986E-01	.9910E-07	.1294E-01
.7400E 01	.1164E 00	.1269E-01	.7288E-05	.8480E-06	.1995E-01	.9246E-07	.1295E-01
.7500E 01	.1177E 00	.1269E-01	.6777E-05	.7997E-06	.2003E-01	.8626E-07	.1296E-01
.7600E 01	.1169E 00	.1269E-01	.6341E-05	.7540E-06	.2011E-01	.8046E-07	.1297E-01
.7700E 01	.1202E 00	.1269E-01	.5914E-05	.7108E-06	.2018E-01	.7505E-07	.1298E-01
.7800E 01	.1215E 00	.1269E-01	.5516E-05	.6700E-06	.2025E-01	.7000E-07	.1299E-01
.7900E 01	.1227E 00	.1269E-01	.5144E-05	.6314E-06	.2031E-01	.6528E-07	.1299E-01
.8000E 01	.1240E 00	.5835E-02	.4797E-05	.5949E-06	.2038E-01	.2799E-07	.1300E-01
.8100E 01	.1246E 00	.5835E-02	.4473E-05	.5573E-06	.2043E-01	.2610E-07	.1300E-01
.8200E 01	.1252E 00	.5835E-02	.4171E-05	.5220E-06	.2049E-01	.2434E-07	.1301E-01
.8300E 01	.1258E 00	.5835E-02	.3888E-05	.4890E-06	.2054E-01	.2269E-07	.1301E-01
.8400E 01	.1263E 00	.5835E-02	.3625E-05	.4580E-06	.2058E-01	.2115E-07	.1301E-01
.8500E 01	.1269E 00	.5835E-02	.3372E-05	.4289E-06	.2063E-01	.1972E-07	.1301E-01
.8600E 01	.1275E 00	.5835E-02	.3150E-05	.4016E-06	.2067E-01	.1838E-07	.1301E-01
.8700E 01	.1279E 00	.1740E-02	.2936E-05	.3756E-06	.2071E-01	.5109E-08	.1301E-01
.8800E 01	.1281E 00	.1740E-02	.2736E-05	.3506E-06	.2075E-01	.4761E-08	.1302E-01
.8900E 01	.1283E 00	.1740E-02	.2550E-05	.3271E-06	.2078E-01	.4437E-08	.1302E-01
.9000E 01	.1285E 00	.1740E-02	.2376E-05	.3053E-06	.2081E-01	.4135E-08	.1302E-01
.9100E 01	.1286E 00	.1740E-02	.2214E-05	.2848E-06	.2084E-01	.3853E-08	.1302E-01
.9200E 01	.1288E 00	.1740E-02	.2063E-05	.2658E-06	.2087E-01	.3590E-08	.1302E-01
.9300E 01	.1290E 00	.1740E-02	.1922E-05	.2480E-06	.2089E-01	.3345E-08	.1302E-01
.9400E 01	.1290E 00	-.7500E-04	.1791E-05	.2311E-06	.2092E-01	-.1343E-09	.1302E-01
.9500E 01	.1290E 00	-.7500E-04	.1668E-05	.2153E-06	.2094E-01	-.1251E-09	.1302E-01
.9600E 01	.1290E 00	-.7500E-04	.1554E-05	.2005E-06	.2096E-01	-.1166E-09	.1302E-01
.9700E 01	.1290E 00	-.7500E-04	.1448E-05	.1868E-06	.2098E-01	-.1086E-09	.1302E-01
.9800E 01	.1290E 00	-.7500E-04	.1343E-05	.1740E-06	.2100E-01	-.1011E-09	.1302E-01
.9900E 01	.1290E 00	-.7500E-04	.1256E-05	.1620E-06	.2102E-01	-.9419E-10	.1302E-01
.1000E 02	.1290E 00	-.1666E-03	.1170E-05	.1509E-06	.2103E-01	-.1949E-09	.1302E-01
.1010E 02	.1290E 00	-.1667E-03	.1069E-05	.1405E-06	.2105E-01	-.1816E-09	.1302E-01
.1020E 02	.1290E 00	-.1667E-03	.1044E-05	.1308E-06	.2106E-01	-.1691E-09	.1302E-01
.1030E 02	.1290E 00	-.1667E-03	.9417E-06	.1218E-06	.2107E-01	-.1575E-09	.1302E-01
.1040E 02	.1289E 00	-.1667E-03	.8797E-06	.1134E-06	.2108E-01	-.1466E-09	.1302E-01
.1050E 02	.1289E 00	-.1667E-03	.8191E-06	.1056E-06	.2109E-01	-.1365E-09	.1302E-01

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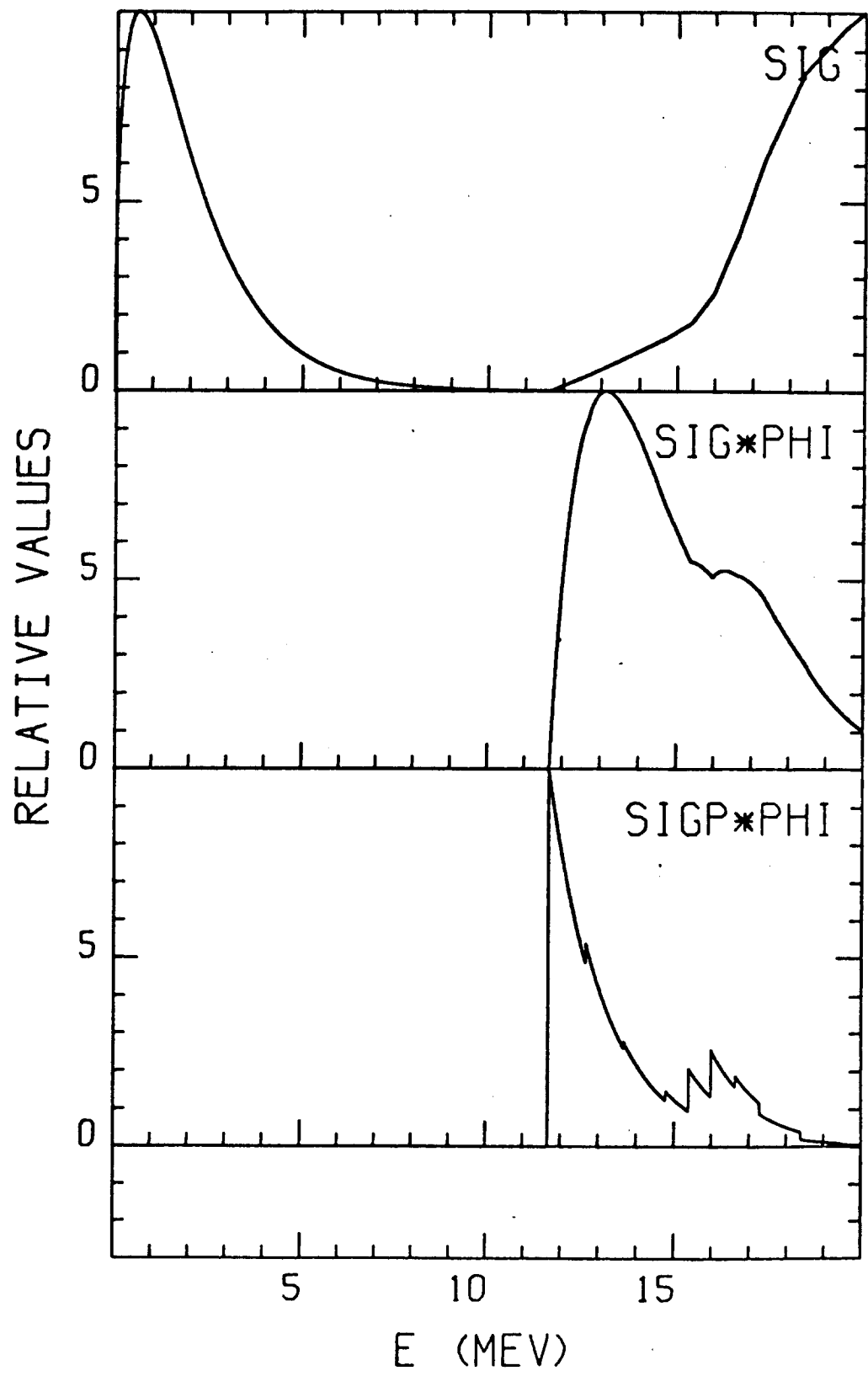
E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.1060E 02	.1249E 00	-.1667E-03	.7627E-06	.9831E-07	.2110E-01	-.1271E-09	.1302E-01
.1070E 02	.1269E 00	-.1667E-03	.7101E-06	.9152E-07	.2111E-01	-.1193E-09	.1302E-01
.1080E 02	.1289E 00	-.1667E-03	.6611E-06	.8519E-07	.2112E-01	-.1102E-09	.1302E-01
.1090E 02	.1289E 00	-.9998E-03	.6154E-06	.7930E-07	.2113E-01	-.6153E-09	.1302E-01
.1100E 02	.1288E 00	-.1000E-02	.5729E-06	.7376E-07	.2114E-01	-.5729E-09	.1302E-01
.1110E 02	.1287E 00	-.1000E-02	.5333E-06	.6861E-07	.2115E-01	-.5333E-09	.1302E-01
.1120E 02	.1286E 00	-.1000E-02	.4965E-06	.6382E-07	.2115E-01	-.4965E-09	.1302E-01
.1130E 02	.1285E 00	-.1000E-02	.4621E-06	.5936E-07	.2116E-01	-.4621E-09	.1302E-01
.1140E 02	.1284E 00	-.1000E-02	.4311E-06	.5521E-07	.2116E-01	-.4301E-09	.1302E-01
.1150E 02	.1283E 00	-.1000E-02	.4003E-06	.5134E-07	.2117E-01	-.4003E-09	.1302E-01
.1160E 02	.1282E 00	-.1000E-02	.3726E-06	.4775E-07	.2117E-01	-.3726E-09	.1302E-01
.1170E 02	.1281E 00	-.1000E-02	.3468E-06	.4440E-07	.2118E-01	-.3468E-09	.1302E-01
.1180E 02	.1280E 00	-.3277E-02	.3227E-06	.4129E-07	.2118E-01	-.1057E-08	.1302E-01
.1190E 02	.1276E 00	-.3278E-02	.3003E-06	.3833E-07	.2119E-01	-.9843E-09	.1302E-01
.1200E 02	.1273E 00	-.3278E-02	.2795E-06	.3557E-07	.2119E-01	-.9160E-09	.1302E-01
.1210E 02	.1270E 00	-.3278E-02	.2600E-06	.3302E-07	.2119E-01	-.8524E-09	.1302E-01
.1220E 02	.1266E 00	-.3278E-02	.2420E-06	.3064E-07	.2120E-01	-.7931E-09	.1302E-01
.1230E 02	.1263E 00	-.3278E-02	.2251E-06	.2844E-07	.2120E-01	-.7380E-09	.1302E-01
.1240E 02	.1260E 00	-.3278E-02	.2095E-06	.2639E-07	.2120E-01	-.6867E-09	.1302E-01
.1250E 02	.1257E 00	-.3278E-02	.1947E-06	.2449E-07	.2121E-01	-.6389E-09	.1302E-01
.1260E 02	.1253E 00	-.3278E-02	.1813E-06	.2273E-07	.2121E-01	-.5944E-09	.1302E-01
.1270E 02	.1250E 00	-.5929E-02	.1687E-06	.2109E-07	.2121E-01	-.1000E-08	.1302E-01
.1280E 02	.1244E 00	-.5929E-02	.1570E-06	.1953E-07	.2121E-01	-.9306E-09	.1302E-01
.1290E 02	.1238E 00	-.5929E-02	.1460E-06	.1808E-07	.2121E-01	-.6657E-09	.1302E-01
.1300E 02	.1232E 00	-.5929E-02	.1358E-06	.1674E-07	.2122E-01	-.8053E-09	.1302E-01
.1310E 02	.1226E 00	-.5929E-02	.1264E-06	.1550E-07	.2122E-01	-.7491E-09	.1302E-01
.1320E 02	.1220E 00	-.5929E-02	.1175E-06	.1434E-07	.2122E-01	-.6969E-09	.1302E-01
.1330E 02	.1213E 00	-.7640E-02	.1093E-06	.1327E-07	.2122E-01	-.8354E-09	.1302E-01
.1340E 02	.1206E 00	-.7640E-02	.1017E-06	.1226E-07	.2122E-01	-.7770E-09	.1302E-01
.1350E 02	.1198E 00	-.7640E-02	.9459E-07	.1133E-07	.2122E-01	-.7227E-09	.1302E-01
.1360E 02	.1190E 00	-.7640E-02	.8798E-07	.1047E-07	.2122E-01	-.6722E-09	.1302E-01
.1370E 02	.1183E 00	-.7640E-02	.8183E-07	.9678E-08	.2123E-01	-.6252E-09	.1302E-01
.1380E 02	.1175E 00	-.8931E-02	.7611E-07	.8940E-08	.2123E-01	-.6797E-09	.1302E-01
.1390E 02	.1166E 00	-.8931E-02	.7078E-07	.8251E-08	.2123E-01	-.6321E-09	.1302E-01
.1400E 02	.1157E 00	-.8931E-02	.6583E-07	.7615E-08	.2123E-01	-.5879E-09	.1302E-01
.1410E 02	.1148E 00	-.8931E-02	.6122E-07	.7027E-08	.2123E-01	-.5467E-09	.1302E-01
.1420E 02	.1139E 00	-.8931E-02	.5693E-07	.6484E-08	.2123E-01	-.5084E-09	.1302E-01
.1430E 02	.1130E 00	-.9788E-02	.5294E-07	.5983E-08	.2123E-01	-.5182E-09	.1302E-01
.1440E 02	.1120E 00	-.9788E-02	.4923E-07	.5515E-08	.2123E-01	-.4819E-09	.1302E-01
.1450E 02	.1110E 00	-.9788E-02	.4578E-07	.5084E-08	.2123E-01	-.4481E-09	.1302E-01
.1460E 02	.1101E 00	-.9788E-02	.4257E-07	.4686E-08	.2123E-01	-.4167E-09	.1301E-01
.1470E 02	.1091E 00	-.9788E-02	.3959E-07	.4316E-08	.2123E-01	-.3875E-09	.1301E-01
.1480E 02	.1081E 00	-.9788E-02	.3681E-07	.3979E-08	.2123E-01	-.3603E-09	.1301E-01
.1490E 02	.1071E 00	-.1062E-01	.3422E-07	.3665E-08	.2123E-01	-.3634E-09	.1301E-01
.1500E 02	.1060E 00	-.1062E-01	.3182E-07	.3374E-08	.2123E-01	-.3379E-09	.1301E-01
.1510E 02	.1050E 00	-.1062E-01	.2959E-07	.3106E-08	.2123E-01	-.3142E-09	.1301E-01
.1520E 02	.1039E 00	-.1062E-01	.2751E-07	.2859E-08	.2123E-01	-.2921E-09	.1301E-01
.1530E 02	.1029E 00	-.1062E-01	.2558E-07	.2630E-08	.2123E-01	-.2716E-09	.1301E-01
.1540E 02	.1018E 00	-.1062E-01	.2378E-07	.2420E-08	.2123E-01	-.2525E-09	.1301E-01
.1550E 02	.1007E 00	-.1136E-01	.2211E-07	.2226E-08	.2123E-01	-.2511E-09	.1301E-01

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E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1560E 02	.9954E-01	-.1136E-01	.2055E-07	.2046E-08	.2123E-01	-.2334E-09	.1301E-01
.1570E 02	.9841E-01	-.1136E-01	.1911E-07	.1886E-08	.2123E-01	-.2170E-09	.1301E-01
.1580E 02	.9727E-01	-.1136E-01	.1776E-07	.1728E-08	.2123E-01	-.2017E-09	.1301E-01
.1590E 02	.9614E-01	-.1136E-01	.1651E-07	.1597E-08	.2124E-01	-.1875E-09	.1301E-01
.1600E 02	.9500E-01	-.1191E-01	.1535E-07	.1458E-08	.2124E-01	-.1828E-09	.1301E-01
.1610E 02	.9381E-01	-.1191E-01	.1427E-07	.1338E-08	.2124E-01	-.1700E-09	.1301E-01
.1620E 02	.9262E-01	-.1191E-01	.1326E-07	.1226E-08	.2124E-01	-.1580E-09	.1301E-01
.1630E 02	.9143E-01	-.1191E-01	.1233E-07	.1127E-08	.2124E-01	-.1469E-09	.1301E-01
.1640E 02	.9024E-01	-.1191E-01	.1146E-07	.1034E-08	.2124E-01	-.1365E-09	.1301E-01
.1650E 02	.8905E-01	-.1175E-01	.1065E-07	.9485E-09	.2124E-01	-.1252E-09	.1301E-01
.1660E 02	.8786E-01	-.1175E-01	.9900E-08	.8700E-09	.2124E-01	-.1163E-09	.1301E-01
.1670E 02	.8670E-01	-.1175E-01	.9202E-08	.7976E-09	.2124E-01	-.1081E-09	.1301E-01
.1680E 02	.8553E-01	-.1175E-01	.8553E-08	.7315E-09	.2124E-01	-.1005E-09	.1301E-01
.1690E 02	.8438E-01	-.1095E-01	.7949E-08	.6706E-09	.2124E-01	-.8706E-10	.1301E-01
.1700E 02	.8329E-01	-.1095E-01	.7386E-08	.6153E-09	.2124E-01	-.8091E-10	.1301E-01
.1710E 02	.8219E-01	-.1095E-01	.6867E-08	.5644E-09	.2124E-01	-.7520E-10	.1301E-01
.1720E 02	.8110E-01	-.1095E-01	.6362E-08	.5175E-09	.2124E-01	-.6989E-10	.1301E-01
.1730E 02	.8000E-01	-.8718E-02	.5931E-08	.4745E-09	.2124E-01	-.5171E-10	.1301E-01
.1740E 02	.7913E-01	-.8717E-02	.5512E-08	.4362E-09	.2124E-01	-.4805E-10	.1301E-01
.1750E 02	.7826E-01	-.8717E-02	.5123E-08	.4009E-09	.2124E-01	-.4465E-10	.1301E-01
.1760E 02	.7739E-01	-.8717E-02	.4761E-08	.3684E-09	.2124E-01	-.4150E-10	.1301E-01
.1770E 02	.7651E-01	-.8717E-02	.4424E-08	.3385E-09	.2124E-01	-.3856E-10	.1301E-01
.1780E 02	.7564E-01	-.8717E-02	.4111E-08	.3110E-09	.2124E-01	-.3584E-10	.1301E-01
.1790E 02	.7477E-01	-.8717E-02	.3821E-08	.2857E-09	.2124E-01	-.3330E-10	.1301E-01
.1800E 02	.7390E-01	-.8717E-02	.3550E-08	.2624E-09	.2124E-01	-.3095E-10	.1301E-01
.1810E 02	.7303E-01	-.6717E-02	.3299E-08	.2409E-09	.2124E-01	-.2876E-10	.1301E-01
.1820E 02	.7216E-01	-.5558E-02	.3066E-08	.2212E-09	.2124E-01	-.1704E-10	.1301E-01
.1830E 02	.7160E-01	-.5558E-02	.2849E-08	.2040E-09	.2124E-01	-.1583E-10	.1301E-01
.1840E 02	.7104E-01	-.5558E-02	.2647E-08	.1881E-09	.2124E-01	-.1471E-10	.1301E-01
.1850E 02	.7049E-01	-.5558E-02	.2460E-08	.1734E-09	.2124E-01	-.1366E-10	.1301E-01
.1860E 02	.6993E-01	-.5558E-02	.2286E-08	.1598E-09	.2124E-01	-.1270E-10	.1301E-01
.1870E 02	.6938E-01	-.5558E-02	.2124E-08	.1473E-09	.2124E-01	-.1180E-10	.1301E-01
.1880E 02	.6882E-01	-.5558E-02	.1973E-08	.1358E-09	.2124E-01	-.1096E-10	.1301E-01
.1890E 02	.6827E-01	-.5558E-02	.1833E-08	.1252E-09	.2124E-01	-.1019E-10	.1301E-01
.1900E 02	.6771E-01	-.5558E-02	.1703E-08	.1153E-09	.2124E-01	-.9464E-11	.1301E-01
.1910E 02	.6716E-01	-.2397E-02	.1583E-08	.1063E-09	.2124E-01	-.3794E-11	.1301E-01
.1920E 02	.6692E-01	-.2394E-02	.1471E-08	.9840E-10	.2124E-01	-.3521E-11	.1301E-01
.1930E 02	.6668E-01	-.2394E-02	.1366E-08	.9110E-10	.2124E-01	-.3271E-11	.1301E-01
.1940E 02	.6644E-01	-.2394E-02	.1269E-08	.8433E-10	.2124E-01	-.3039E-11	.1301E-01
.1950E 02	.6620E-01	-.2394E-02	.1179E-08	.7807E-10	.2124E-01	-.2824E-11	.1301E-01
.1960E 02	.6596E-01	-.2394E-02	.1096E-08	.7227E-10	.2124E-01	-.2623E-11	.1301E-01
.1970E 02	.6572E-01	-.2394E-02	.1011E-08	.6690E-10	.2124E-01	-.2437E-11	.1301E-01
.1980E 02	.6548E-01	-.2394E-02	.9457E-09	.6192E-10	.2124E-01	-.2264E-11	.1301E-01
.1990E 02	.6524E-01	-.2394E-02	.8786E-09	.5732E-10	.2124E-01	-.2104E-11	.1301E-01

SPECTRUM AVERAGE CHLSS SECTION = .2124E-01

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U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1170E 02	.5736E-04	.4097E-02	.3468E-06	.1989E-10	.1496E-09	.1421E-08	.2142E-07
.1180E 02	.4671E-03	.4097E-02	.3227E-06	.1507E-09	.8906E-08	.1322E-08	.1584E-06
.1190E 02	.3768E-03	.4097E-02	.3003E-06	.2633E-09	.2981E-07	.1230E-08	.2863E-06
.1200E 02	.1266E-02	.4097E-02	.2793E-06	.3595E-09	.6113E-07	.1145E-08	.4046E-06
.1210E 02	.1696E-02	.4097E-02	.2600E-06	.4411E-09	.1013E-06	.1065E-08	.5151E-06
.1220E 02	.2106E-02	.4097E-02	.2420E-06	.5096E-09	.1490E-06	.9914E-09	.6178E-06
.1230E 02	.2516E-02	.4097E-02	.2251E-06	.5664E-09	.2029E-06	.9225E-09	.7135E-06
.1240E 02	.2925E-02	.4097E-02	.2095E-06	.6126E-09	.2620E-06	.8583E-09	.8024E-06
.1250E 02	.3335E-02	.4097E-02	.1949E-06	.6500E-09	.3252E-06	.7986E-09	.8852E-06
.1260E 02	.3745E-02	.4097E-02	.1813E-06	.6791E-09	.3917E-06	.7430E-09	.9622E-06
.1270E 02	.4162E-02	.4529E-02	.1687E-06	.7021E-09	.4608E-06	.7641E-09	.1035E-06
.1280E 02	.4615E-02	.4529E-02	.1570E-06	.7243E-09	.5322E-06	.7108E-09	.1109E-05
.1290E 02	.5066E-02	.4529E-02	.1460E-06	.7399E-09	.6055E-06	.6613E-09	.1177E-05
.1300E 02	.5520E-02	.4529E-02	.1358E-06	.7499E-09	.6900E-06	.6152E-09	.1241E-05
.1310E 02	.5973E-02	.4529E-02	.1264E-06	.7548E-09	.7553E-06	.5723E-09	.1301E-05
.1320E 02	.6426E-02	.4529E-02	.1175E-06	.7553E-09	.8308E-06	.5323E-09	.1356E-05
.1330E 02	.6879E-02	.4529E-02	.1093E-06	.7521E-09	.9062E-06	.4952E-09	.1407E-05
.1340E 02	.7332E-02	.4529E-02	.1017E-06	.7457E-09	.9811E-06	.4606E-09	.1455E-05
.1350E 02	.7785E-02	.4529E-02	.9459E-07	.7364E-09	.1055E-05	.4284E-09	.1499E-05
.1360E 02	.8238E-02	.4529E-02	.8798E-07	.7248E-09	.1128E-05	.3985E-09	.1541E-05
.1370E 02	.8696E-02	.4825E-02	.8183E-07	.7117E-09	.1200E-05	.3948E-09	.1579E-05
.1380E 02	.9179E-02	.4825E-02	.7611E-07	.6986E-09	.1271E-05	.3672E-09	.1613E-05
.1390E 02	.9661E-02	.4825E-02	.7078E-07	.6839E-09	.1340E-05	.3415E-09	.1653E-05
.1400E 02	.1014E-01	.4825E-02	.6583E-07	.6678E-09	.1407E-05	.3176E-09	.1686E-05
.1410E 02	.1063E-01	.4825E-02	.6122E-07	.6506E-09	.1473E-05	.2954E-09	.1716E-05
.1420E 02	.1111E-01	.4825E-02	.5693E-07	.6325E-09	.1537E-05	.2747E-09	.1745E-05
.1430E 02	.1159E-01	.4818E-02	.5294E-07	.6137E-09	.1600E-05	.2551E-09	.1771E-05
.1440E 02	.1207E-01	.4818E-02	.4923E-07	.5944E-09	.1660E-05	.2372E-09	.1796E-05
.1450E 02	.1255E-01	.4818E-02	.4578E-07	.5748E-09	.1719E-05	.2206E-09	.1819E-05
.1460E 02	.1304E-01	.4818E-02	.4257E-07	.5550E-09	.1775E-05	.2051E-09	.1840E-05
.1470E 02	.1352E-01	.4818E-02	.3959E-07	.5351E-09	.1830E-05	.1907E-09	.1860E-05
.1480E 02	.1400E-01	.5773E-02	.3661E-07	.5153E-09	.1882E-05	.2125E-09	.1878E-05
.1490E 02	.1458E-01	.5773E-02	.3422E-07	.4989E-09	.1933E-05	.1976E-09	.1899E-05
.1500E 02	.1515E-01	.5773E-02	.3182E-07	.4822E-09	.1982E-05	.1837E-09	.1918E-05
.1510E 02	.1573E-01	.5773E-02	.2959E-07	.4655E-09	.2029E-05	.1708E-09	.1936E-05
.1520E 02	.1631E-01	.5773E-02	.2751E-07	.4486E-09	.2075E-05	.1588E-09	.1952E-05
.1530E 02	.1689E-01	.5773E-02	.2553E-07	.4319E-09	.2119E-05	.1477E-09	.1967E-05
.1540E 02	.1746E-01	.1256E-01	.2370E-07	.4153E-09	.2161E-05	.2986E-09	.1982E-05
.1550E 02	.1872E-01	.1256E-01	.2211E-07	.4138E-09	.2203E-05	.2776E-09	.2011E-05
.1560E 02	.1998E-01	.1256E-01	.2055E-07	.4105E-09	.2244E-05	.2581E-09	.2037E-05
.1570E 02	.2123E-01	.1256E-01	.1911E-07	.4056E-09	.2285E-05	.2400E-09	.2062E-05
.1580E 02	.2249E-01	.1256E-01	.1775E-07	.3994E-09	.2325E-05	.2231E-09	.2085E-05
.1590E 02	.2374E-01	.1256E-01	.1651E-07	.3920E-09	.2365E-05	.2074E-09	.2107E-05
.1600E 02	.2500E-01	.2401E-01	.1535E-07	.3837E-09	.2403E-05	.3685E-09	.2127E-05
.1610E 02	.2740E-01	.2402E-01	.1427E-07	.3910E-09	.2442E-05	.3427E-09	.2163E-05
.1620E 02	.2980E-01	.2402E-01	.1326E-07	.3953E-09	.2482E-05	.3185E-09	.2196E-05
.1630E 02	.3221E-01	.2402E-01	.1233E-07	.3970E-09	.2521E-05	.2961E-09	.2226E-05
.1640E 02	.3461E-01	.2402E-01	.1146E-07	.3966E-09	.2561E-05	.2752E-09	.2255E-05
.1650E 02	.3701E-01	.2402E-01	.1065E-07	.3942E-09	.2600E-05	.2558E-09	.2261E-05
.1660E 02	.3941E-01	.2402E-01	.9900E-08	.3902E-09	.2640E-05	.2378E-09	.2306E-05

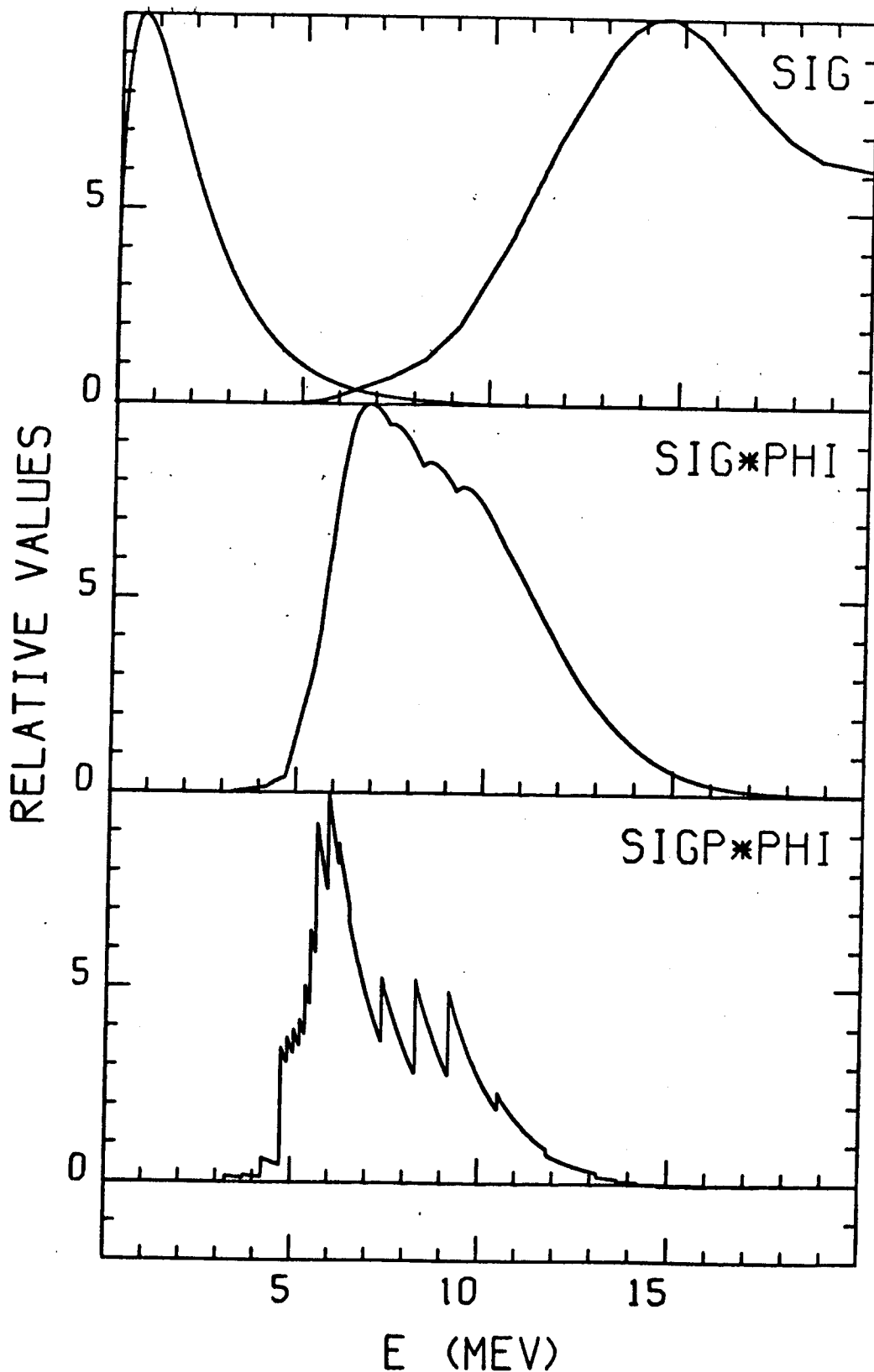
TJ-48(N,N-P)SC-47  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1670E 02	.4203E-01	.2629E-01	.9202E-08	.3867E-09	.2678E-05	.2603E-09	.2331E-05
.1680E 02	.4486E-01	.2629E-01	.8553E-08	.3836E-09	.2717E-05	.2420E-09	.2355E-05
.1690E 02	.4768E-01	.2629E-01	.7949E-08	.3791E-09	.2755E-05	.2249E-09	.2379E-05
.1700E 02	.5051E-01	.2629E-01	.7388E-08	.3732E-09	.2793E-05	.2090E-09	.2401E-05
.1710E 02	.5334E-01	.2629E-01	.6867E-08	.3663E-09	.2830E-05	.1943E-09	.2421E-05
.1720E 02	.5617E-01	.2629E-01	.6382E-08	.3585E-09	.2866E-05	.1805E-09	.2440E-05
.1730E 02	.5900E-01	.2138E-01	.5931E-08	.3499E-09	.2901E-05	.1268E-09	.2457E-05
.1740E 02	.6114E-01	.2138E-01	.5512E-08	.3370E-09	.2936E-05	.1173E-09	.2470E-05
.1750E 02	.6328E-01	.2138E-01	.5123E-08	.3241E-09	.2969E-05	.1095E-09	.2481E-05
.1760E 02	.6541E-01	.2138E-01	.4761E-08	.3114E-09	.3001E-05	.1018E-09	.2491E-05
.1770E 02	.6755E-01	.2138E-01	.4424E-08	.2989E-09	.3031E-05	.9458E-10	.2501E-05
.1780E 02	.6969E-01	.2138E-01	.4111E-08	.2865E-09	.3060E-05	.8789E-10	.2510E-05
.1790E 02	.7183E-01	.2138E-01	.3821E-08	.2744E-09	.3098E-05	.8167E-10	.2519E-05
.1800E 02	.7396E-01	.2138E-01	.3550E-08	.2626E-09	.3115E-05	.7590E-10	.2527E-05
.1810E 02	.7610E-01	.2138E-01	.3299E-08	.2511E-09	.3141E-05	.7053E-10	.2534E-05
.1820E 02	.7824E-01	.2138E-01	.3066E-08	.2399E-09	.3165E-05	.6554E-10	.2541E-05
.1830E 02	.8038E-01	.2138E-01	.2849E-08	.2290E-09	.3189E-05	.6090E-10	.2547E-05
.1840E 02	.8251E-01	.1044E-01	.2647E-08	.2184E-09	.3211E-05	.2766E-10	.2553E-05
.1850E 02	.8356E-01	.1044E-01	.2460E-08	.2055E-09	.3232E-05	.2568E-10	.2556E-05
.1860E 02	.8460E-01	.1044E-01	.2266E-08	.1934E-09	.3252E-05	.2386E-10	.2558E-05
.1870E 02	.8565E-01	.1044E-01	.2124E-08	.1819E-09	.3271E-05	.2217E-10	.2560E-05
.1880E 02	.8669E-01	.1044E-01	.1973E-08	.1711E-09	.3289E-05	.2060E-10	.2563E-05
.1890E 02	.8774E-01	.1044E-01	.1833E-08	.1609E-09	.3305E-05	.1914E-10	.2565E-05
.1900E 02	.8878E-01	.1044E-01	.1703E-08	.1512E-09	.3321E-05	.1779E-10	.2566E-05
.1910E 02	.8982E-01	.1044E-01	.1583E-08	.1422E-09	.3336E-05	.1653E-10	.2568E-05
.1920E 02	.9087E-01	.1044E-01	.1471E-08	.1336E-09	.3349E-05	.1535E-10	.2570E-05
.1930E 02	.9191E-01	.1044E-01	.1366E-08	.1256E-09	.3362E-05	.1426E-10	.2571E-05
.1940E 02	.9296E-01	.1044E-01	.1269E-08	.1180E-09	.3374E-05	.1325E-10	.2573E-05
.1950E 02	.9400E-01	.8000E-02	.1179E-08	.1109E-09	.3386E-05	.9437E-11	.2574E-05
.1960E 02	.9480E-01	.8000E-02	.1096E-08	.1039E-09	.3397E-05	.8765E-11	.2575E-05
.1970E 02	.9560E-01	.8000E-02	.1018E-08	.9731E-10	.3407E-05	.8143E-11	.2576E-05
.1980E 02	.9640E-01	.8000E-02	.9457E-09	.9116E-10	.3416E-05	.7565E-11	.2576E-05
.1990E 02	.9720E-01	.8000E-02	.8766E-09	.8540E-10	.3425E-05	.7028E-11	.2577E-05

SPECTRUM AVERAGE CROSS SECTION = .3433E-05



TI-48 (N, P) SC-48  
U-235 FISSION SPECTRUM



TI-48(N,P)SC-48  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.3300E 01	.1898E-06	.6327E-05	.1104E-03	.2095E-10	.3267E-09	.6983E-09	.2185E-07
.3400E 01	.8224E-06	.6327E-05	.1038E-03	.8539E-10	.5744E-08	.6569E-09	.8957E-07
.3500E 01	.1455E-05	.6327E-05	.9762E-04	.1420E-09	.1721E-07	.6176E-09	.1533E-06
.3600E 01	.2088E-05	.6327E-05	.9175E-04	.1915E-09	.3397E-07	.5804E-09	.2131E-06
.3700E 01	.2720E-05	.6327E-05	.8619E-04	.2345E-09	.5534E-07	.5453E-09	.2694E-06
.3800E 01	.3500E-05	.1000E-04	.8095E-04	.2833E-09	.8095E-07	.8095E-09	.3346E-06
.3900E 01	.4500E-05	.1000E-04	.7599E-04	.3420E-09	.1123E-06	.7599E-09	.4130E-06
.4000E 01	.5500E-05	.1000E-04	.7132E-04	.3923E-09	.1491E-06	.7132E-09	.4866E-06
.4100E 01	.6500E-05	.1000E-04	.6691E-04	.4349E-09	.1906E-06	.6691E-09	.5557E-06
.4200E 01	.7500E-05	.1000E-04	.6276E-04	.4707E-09	.2359E-06	.6276E-09	.6205E-06
.4300E 01	.1035E-04	.4694E-04	.5884E-04	.6089E-09	.2873E-06	.2762E-08	.7939E-06
.4400E 01	.1504E-04	.4694E-04	.5516E-04	.6297E-09	.3596E-06	.2589E-08	.1061E-05
.4500E 01	.1973E-04	.4694E-04	.5169E-04	.1020E-08	.4524E-06	.2426E-08	.1312E-05
.4600E 01	.2443E-04	.4694E-04	.4843E-04	.1183E-08	.5629E-06	.2273E-08	.1547E-05
.4700E 01	.2912E-04	.4694E-04	.4537E-04	.1321E-08	.6884E-06	.2129E-08	.1767E-05
.4800E 01	.3227E-04	.3545E-03	.4249E-04	.1221E-08	.6508E-06	.1506E-07	.2786E-05
.4900E 01	.3772E-04	.3545E-03	.3973E-04	.3489E-08	.1138E-05	.1410E-07	.4243E-05
.5000E 01	.1300E-03	.4250E-03	.3724E-04	.4840E-08	.1557E-05	.1582E-07	.5872E-05
.5100E 01	.1750E-03	.5001E-03	.3485E-04	.6098E-08	.2103E-05	.1743E-07	.7493E-05
.5200E 01	.2250E-03	.5001E-03	.3261E-04	.7337E-08	.2777E-05	.1631E-07	.9179E-05
.5300E 01	.2815E-03	.5931E-03	.3051E-04	.8589E-08	.3572E-05	.1809E-07	.1096E-04
.5400E 01	.3473E-03	.7672E-03	.2854E-04	.9911E-08	.4494E-05	.2246E-07	.1290E-04
.5500E 01	.4260E-03	.7872E-03	.2669E-04	.1137E-07	.5560E-05	.2101E-07	.1508E-04
.5600E 01	.5357E-03	.1106E-02	.2496E-04	.1337E-07	.6800E-05	.2764E-07	.1791E-04
.5700E 01	.6837E-03	.1729E-02	.2333E-04	.1595E-07	.8252E-05	.4034E-07	.2149E-04
.5800E 01	.8566E-03	.1729E-02	.2161E-04	.1868E-07	.9989E-05	.3771E-07	.2539E-04
.5900E 01	.1030E-02	.1729E-02	.2036E-04	.2099E-07	.1198E-04	.3525E-07	.2903E-04
.6000E 01	.1238E-02	.2294E-02	.1905E-04	.2359E-07	.1420E-04	.4371E-07	.3315E-04
.6100E 01	.1468E-02	.2294E-02	.1789E-04	.2612E-07	.1669E-04	.4084E-07	.3737E-04
.6200E 01	.1697E-02	.2294E-02	.1663E-04	.2822E-07	.1941E-04	.3815E-07	.4132E-04
.6300E 01	.1937E-02	.2449E-02	.1553E-04	.3009E-07	.2233E-04	.3804E-07	.4517E-04
.6400E 01	.2182E-02	.2449E-02	.1451E-04	.3165E-07	.2542E-04	.3553E-07	.4885E-04
.6500E 01	.2427E-02	.2449E-02	.1355E-04	.3288E-07	.2865E-04	.3319E-07	.5228E-04
.6600E 01	.2662E-02	.2308E-02	.1265E-04	.3367E-07	.3198E-04	.2920E-07	.5536E-04
.6700E 01	.2892E-02	.2308E-02	.1161E-04	.3417E-07	.3537E-04	.2726E-07	.5818E-04
.6800E 01	.3123E-02	.2308E-02	.1103E-04	.3444E-07	.3881E-04	.2545E-07	.6081E-04
.6900E 01	.3354E-02	.2308E-02	.1029E-04	.3453E-07	.4226E-04	.2376E-07	.6327E-04
.7000E 01	.3585E-02	.2308E-02	.9609E-05	.3444E-07	.4571E-04	.2217E-07	.6556E-04
.7100E 01	.3815E-02	.2308E-02	.8968E-05	.3421E-07	.4914E-04	.2069E-07	.6771E-04
.7200E 01	.4046E-02	.2308E-02	.8369E-05	.3386E-07	.5255E-04	.1931E-07	.6970E-04
.7300E 01	.4277E-02	.2308E-02	.7809E-05	.3340E-07	.5591E-04	.1802E-07	.7157E-04
.7400E 01	.4508E-02	.2308E-02	.7286E-05	.3284E-07	.5922E-04	.1681E-07	.7331E-04
.7500E 01	.4821E-02	.3336E-02	.6797E-05	.3277E-07	.6250E-04	.2267E-07	.7552E-04
.7600E 01	.5154E-02	.3336E-02	.6341E-05	.3268E-07	.6577E-04	.2115E-07	.7771E-04
.7700E 01	.5488E-02	.3336E-02	.5914E-05	.3246E-07	.6903E-04	.1973E-07	.7975E-04
.7800E 01	.5821E-02	.3336E-02	.5516E-05	.3211E-07	.7226E-04	.1840E-07	.8165E-04
.7900E 01	.6155E-02	.3336E-02	.5144E-05	.3166E-07	.7545E-04	.1716E-07	.8343E-04
.8000E 01	.6489E-02	.3336E-02	.4797E-05	.3113E-07	.7859E-04	.1600E-07	.8509E-04
.8100E 01	.6822E-02	.3336E-02	.4473E-05	.3052E-07	.8167E-04	.1492E-07	.8663E-04
.8200E 01	.7156E-02	.3336E-02	.4171E-05	.2985E-07	.8469E-04	.1391E-07	.8807E-04

TI-48(N,P)SC-48  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.8300E 01	.7489E-02	.3336E-02	.3688E-05	.2912E-07	.8764E-04	.1297E-07	.6942E-04
.8400E 01	.8077E-02	.6154E-02	.3625E-05	.2928E-07	.9055E-04	.2231E-07	.9163E-04
.8500E 01	.8692E-02	.6154E-02	.3379E-05	.2937E-07	.9349E-04	.2080E-07	.9373E-04
.8600E 01	.9307E-02	.6154E-02	.3150E-05	.2932E-07	.9642E-04	.1936E-07	.9579E-04
.8700E 01	.9923E-02	.6154E-02	.2936E-05	.2913E-07	.9934E-04	.1807E-07	.9766E-04
.8800E 01	.1054E-01	.6154E-02	.2736E-05	.2883E-07	.1022E-03	.1684E-07	.9940E-04
.8900E 01	.1115E-01	.6154E-02	.2550E-05	.2844E-07	.1051E-03	.1569E-07	.1010E-03
.9000E 01	.1177E-01	.6154E-02	.2376E-05	.2797E-07	.1079E-03	.1462E-07	.1025E-03
.9100E 01	.1238E-01	.6154E-02	.2214E-05	.2742E-07	.1107E-03	.1363E-07	.1040E-03
.9200E 01	.1300E-01	.1086E-01	.2063E-05	.2682E-07	.1134E-03	.1241E-07	.1053E-03
.9300E 01	.1409E-01	.1086E-01	.1922E-05	.2708E-07	.1161E-03	.1208E-07	.1074E-03
.9400E 01	.1517E-01	.1086E-01	.1791E-05	.2717E-07	.1188E-03	.1194E-07	.1095E-03
.9500E 01	.1626E-01	.1086E-01	.1668E-05	.2713E-07	.1215E-03	.1182E-07	.1113E-03
.9600E 01	.1735E-01	.1086E-01	.1554E-05	.2696E-07	.1242E-03	.1168E-07	.1131E-03
.9700E 01	.1843E-01	.1086E-01	.1446E-05	.2668E-07	.1269E-03	.1157E-07	.1147E-03
.9800E 01	.1952E-01	.1086E-01	.1346E-05	.2632E-07	.1296E-03	.1146E-07	.1162E-03
.9900E 01	.2060E-01	.1086E-01	.1256E-05	.2588E-07	.1322E-03	.1136E-07	.1176E-03
.1000E 02	.2169E-01	.1086E-01	.1170E-05	.2537E-07	.1347E-03	.1127E-07	.1190E-03
.1010E 02	.2278E-01	.1086E-01	.1089E-05	.2481E-07	.1373E-03	.1118E-07	.1202E-03
.1020E 02	.2386E-01	.1086E-01	.1014E-05	.2421E-07	.1397E-03	.1102E-07	.1213E-03
.1030E 02	.2495E-01	.1086E-01	.9447E-06	.2357E-07	.1421E-03	.1076E-07	.1224E-03
.1040E 02	.2604E-01	.1086E-01	.8797E-06	.2290E-07	.1444E-03	.1056E-08	.1234E-03
.1050E 02	.2712E-01	.1086E-01	.8191E-06	.2222E-07	.1467E-03	.1039E-08	.1243E-03
.1060E 02	.2837E-01	.1325E-01	.7627E-06	.2164E-07	.1489E-03	.1010E-07	.1253E-03
.1070E 02	.2969E-01	.1325E-01	.7101E-06	.2108E-07	.1510E-03	.9406E-08	.1263E-03
.1080E 02	.3102E-01	.1325E-01	.6611E-06	.2051E-07	.1531E-03	.8757E-08	.1272E-03
.1090E 02	.3234E-01	.1325E-01	.6154E-06	.1990E-07	.1551E-03	.8152E-08	.1280E-03
.1100E 02	.3367E-01	.1325E-01	.5729E-06	.1929E-07	.1571E-03	.7589E-08	.1288E-03
.1110E 02	.3499E-01	.1325E-01	.5333E-06	.1866E-07	.1590E-03	.7065E-08	.1295E-03
.1120E 02	.3632E-01	.1325E-01	.4965E-06	.1803E-07	.1608E-03	.6576E-08	.1302E-03
.1130E 02	.3764E-01	.1325E-01	.4621E-06	.1739E-07	.1626E-03	.6121E-08	.1309E-03
.1140E 02	.3897E-01	.1325E-01	.4301E-06	.1676E-07	.1643E-03	.5698E-08	.1314E-03
.1150E 02	.4029E-01	.1325E-01	.4003E-06	.1613E-07	.1659E-03	.5303E-08	.1320E-03
.1160E 02	.4162E-01	.1325E-01	.3726E-06	.1551E-07	.1675E-03	.4935E-08	.1325E-03
.1170E 02	.4294E-01	.1325E-01	.3468E-06	.1489E-07	.1690E-03	.4593E-08	.1330E-03
.1180E 02	.4426E-01	.1325E-01	.3227E-06	.1428E-07	.1705E-03	.4275E-08	.1334E-03
.1190E 02	.4552E-01	.1114E-01	.3003E-06	.1367E-07	.1719E-03	.3945E-08	.1338E-03
.1200E 02	.4683E-01	.1114E-01	.2795E-06	.1303E-07	.1732E-03	.3613E-08	.1341E-03
.1210E 02	.4775E-01	.1114E-01	.2606E-06	.1242E-07	.1745E-03	.3287E-08	.1344E-03
.1220E 02	.4886E-01	.1114E-01	.2420E-06	.1182E-07	.1757E-03	.2955E-08	.1347E-03
.1230E 02	.4998E-01	.1114E-01	.2251E-06	.1125E-07	.1768E-03	.2508E-08	.1350E-03
.1240E 02	.5109E-01	.1114E-01	.2095E-06	.1070E-07	.1779E-03	.2333E-08	.1352E-03
.1250E 02	.5220E-01	.1114E-01	.1949E-06	.1017E-07	.1790E-03	.2171E-08	.1354E-03
.1260E 02	.5332E-01	.1114E-01	.1813E-06	.9669E-08	.1800E-03	.2020E-08	.1357E-03
.1270E 02	.5443E-01	.1114E-01	.1687E-06	.9183E-08	.1809E-03	.1879E-08	.1358E-03
.1280E 02	.5554E-01	.1114E-01	.1570E-06	.8718E-08	.1818E-03	.1748E-08	.1360E-03
.1290E 02	.5666E-01	.1114E-01	.1460E-06	.8273E-08	.1827E-03	.1626E-08	.1362E-03
.1300E 02	.5777E-01	.1114E-01	.1358E-06	.7848E-08	.1835E-03	.1513E-08	.1364E-03
.1310E 02	.5889E-01	.1114E-01	.1264E-06	.7441E-08	.1842E-03	.1407E-08	.1365E-03
.1320E 02	.6000E-01	.7159E-02	.1175E-06	.7053E-08	.1850E-03	.1345E-09	.1366E-03

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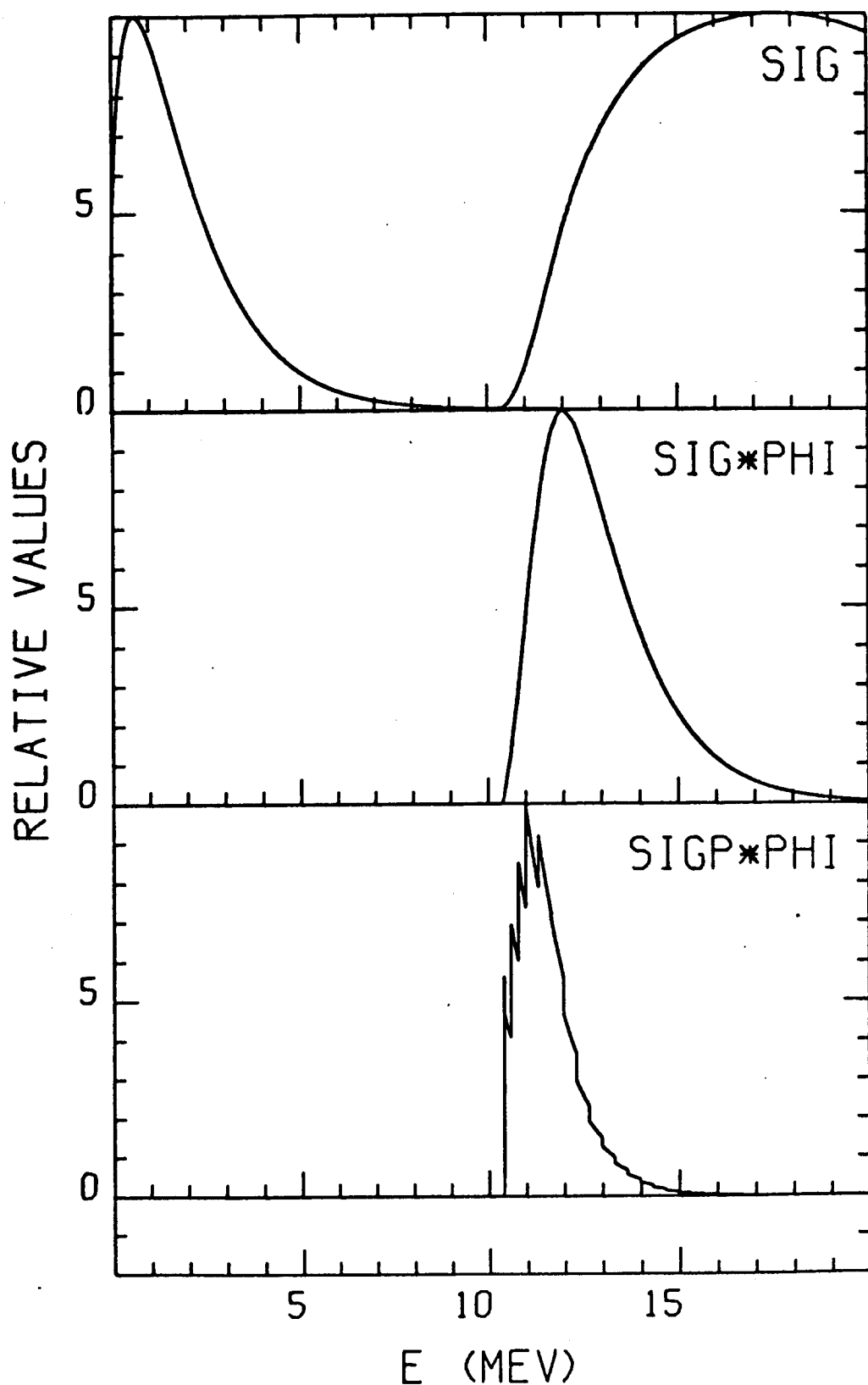
E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.1330E 02	.6072E-01	.7158E-02	.1093E-06	.6638E-08	.1456E-03	.7826E-09	.1367E-03
.1340E 02	.6143E-01	.7158E-02	.1017E-06	.6248E-08	.1863E-03	.7279E-09	.1369E-03
.1350E 02	.6215E-01	.7158E-02	.9459E-07	.5879E-08	.1869E-03	.6771E-09	.1369E-03
.1360E 02	.6286E-01	.7158E-02	.8798E-07	.5531E-08	.1875E-03	.6298E-09	.1369E-03
.1370E 02	.6358E-01	.7158E-02	.8163E-07	.5203E-08	.1880E-03	.5857E-09	.1370E-03
.1380E 02	.6408E-01	.3933E-02	.7611E-07	.4877E-08	.1885E-03	.2993E-09	.1370E-03
.1390E 02	.6447E-01	.3933E-02	.7078E-07	.4564E-08	.1490E-03	.2784E-09	.1371E-03
.1400E 02	.6486E-01	.3933E-02	.6583E-07	.4270E-08	.1894E-03	.2589E-09	.1371E-03
.1410E 02	.6526E-01	.3933E-02	.6122E-07	.3995E-08	.1898E-03	.2408E-09	.1371E-03
.1420E 02	.6565E-01	.3933E-02	.5693E-07	.3738E-08	.1902E-03	.2239E-09	.1371E-03
.1430E 02	.6592E-01	.1595E-03	.5294E-07	.3490E-08	.1906E-03	.8443E-11	.1371E-03
.1440E 02	.6594E-01	.1595E-03	.4923E-07	.3246E-08	.1909E-03	.7852E-11	.1371E-03
.1450E 02	.6595E-01	.1595E-03	.4578E-07	.3019E-08	.1912E-03	.7301E-11	.1371E-03
.1460E 02	.6597E-01	.1595E-03	.4257E-07	.2808E-08	.1915E-03	.6789E-11	.1371E-03
.1470E 02	.6598E-01	.1595E-03	.3959E-07	.2612E-08	.1918E-03	.6313E-11	.1371E-03
.1480E 02	.6600E-01	-.4453E-02	.3681E-07	.2429E-08	.1920E-03	-.1639E-09	.1371E-03
.1490E 02	.6553E-01	-.4456E-02	.3422E-07	.2244E-08	.1923E-03	-.1525E-09	.1371E-03
.1500E 02	.6511E-01	-.4456E-02	.3182E-07	.2072E-08	.1925E-03	-.1418E-09	.1371E-03
.1510E 02	.6466E-01	-.4456E-02	.2959E-07	.1913E-08	.1927E-03	-.1318E-09	.1371E-03
.1520E 02	.6422E-01	-.4456E-02	.2751E-07	.1767E-08	.1929E-03	-.1226E-09	.1371E-03
.1530E 02	.6377E-01	-.4456E-02	.2558E-07	.1631E-08	.1930E-03	-.1140E-09	.1371E-03
.1540E 02	.6333E-01	-.4456E-02	.2378E-07	.1506E-08	.1932E-03	-.1059E-09	.1371E-03
.1550E 02	.6289E-01	-.4456E-02	.2211E-07	.1390E-08	.1933E-03	-.9850E-10	.1371E-03
.1560E 02	.6222E-01	-.7714E-02	.2055E-07	.1279E-08	.1935E-03	-.1585E-09	.1370E-03
.1570E 02	.6145E-01	-.7714E-02	.1911E-07	.1174E-08	.1936E-03	-.1474E-09	.1370E-03
.1580E 02	.6067E-01	-.7714E-02	.1776E-07	.1078E-08	.1937E-03	-.1370E-09	.1370E-03
.1590E 02	.5990E-01	-.7714E-02	.1651E-07	.9890E-09	.1938E-03	-.1274E-09	.1370E-03
.1600E 02	.5913E-01	-.7714E-02	.1535E-07	.9076E-09	.1939E-03	-.1184E-09	.1370E-03
.1610E 02	.5836E-01	-.7714E-02	.1427E-07	.8326E-09	.1940E-03	-.1101E-09	.1370E-03
.1620E 02	.5759E-01	-.7714E-02	.1326E-07	.7638E-09	.1941E-03	-.1023E-09	.1370E-03
.1630E 02	.5680E-01	-.8284E-02	.1233E-07	.7002E-09	.1941E-03	-.1021E-09	.1370E-03
.1640E 02	.5597E-01	-.8284E-02	.1146E-07	.6414E-09	.1942E-03	-.9492E-10	.1369E-03
.1650E 02	.5514E-01	-.8284E-02	.1065E-07	.5873E-09	.1943E-03	-.8823E-10	.1369E-03
.1660E 02	.5431E-01	-.8284E-02	.9900E-08	.5377E-09	.1943E-03	-.8201E-10	.1369E-03
.1670E 02	.5349E-01	-.8284E-02	.9202E-08	.4922E-09	.1944E-03	-.7623E-10	.1369E-03
.1680E 02	.5266E-01	-.8284E-02	.8553E-08	.4504E-09	.1944E-03	-.7085E-10	.1369E-03
.1690E 02	.5183E-01	-.8284E-02	.7949E-08	.4120E-09	.1945E-03	-.6585E-10	.1369E-03
.1700E 02	.5100E-01	-.6443E-02	.7388E-08	.3768E-09	.1945E-03	-.4760E-10	.1369E-03
.1710E 02	.5036E-01	-.6442E-02	.6867E-08	.3458E-09	.1945E-03	-.4423E-10	.1369E-03
.1720E 02	.4971E-01	-.6442E-02	.6382E-08	.3173E-09	.1946E-03	-.4111E-10	.1369E-03
.1730E 02	.4907E-01	-.6442E-02	.5931E-08	.2910E-09	.1946E-03	-.3821E-10	.1369E-03
.1740E 02	.4842E-01	-.6442E-02	.5512E-08	.2669E-09	.1946E-03	-.3551E-10	.1369E-03
.1750E 02	.4778E-01	-.6442E-02	.5123E-08	.2448E-09	.1947E-03	-.3300E-10	.1369E-03
.1760E 02	.4713E-01	-.6442E-02	.4761E-08	.2244E-09	.1947E-03	-.3067E-10	.1369E-03
.1770E 02	.4649E-01	-.6442E-02	.4424E-08	.2057E-09	.1947E-03	-.2850E-10	.1369E-03
.1780E 02	.4585E-01	-.6442E-02	.4111E-08	.1885E-09	.1947E-03	-.2648E-10	.1369E-03
.1790E 02	.4537E-01	-.3996E-02	.3821E-08	.1733E-09	.1947E-03	-.1527E-10	.1369E-03
.1800E 02	.4497E-01	-.3996E-02	.3550E-08	.1596E-09	.1948E-03	-.1419E-10	.1369E-03
.1810E 02	.4457E-01	-.3996E-02	.3299E-08	.1470E-09	.1948E-03	-.1319E-10	.1369E-03
.1820E 02	.4417E-01	-.3996E-02	.3066E-08	.1354E-09	.1948E-03	-.1225E-10	.1369E-03

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U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1830E 02	.4377E-01	-.3996E-02	.2849E-08	.1247E-09	.1948E-03	-.1138E-10	.1369E-03
.1840E 02	.4337E-01	-.3996E-02	.2647E-08	.1148E-09	.1948E-03	-.1058E-10	.1369E-03
.1850E 02	.4297E-01	-.3996E-02	.2460E-08	.1057E-09	.1948E-03	-.9830E-11	.1369E-03
.1860E 02	.4257E-01	-.3996E-02	.2266E-08	.9729E-10	.1948E-03	-.9134E-11	.1369E-03
.1870E 02	.4226E-01	-.1276E-02	.2124E-08	.8974E-10	.1949E-03	-.2710E-11	.1369E-03
.1880E 02	.4213E-01	-.1276E-02	.1973E-08	.8313E-10	.1949E-03	-.2518E-11	.1369E-03
.1890E 02	.4200E-01	-.1276E-02	.1833E-08	.7701E-10	.1949E-03	-.2340E-11	.1369E-03
.1900E 02	.4188E-01	-.1276E-02	.1703E-08	.7133E-10	.1949E-03	-.2174E-11	.1369E-03
.1910E 02	.4175E-01	-.1276E-02	.1593E-08	.6608E-10	.1949E-03	-.2020E-11	.1369E-03
.1920E 02	.4162E-01	-.1276E-02	.1471E-08	.6120E-10	.1949E-03	-.1876E-11	.1369E-03
.1930E 02	.4149E-01	-.1276E-02	.1366E-08	.5669E-10	.1949E-03	-.1743E-11	.1369E-03
.1940E 02	.4137E-01	-.1276E-02	.1269E-08	.5251E-10	.1949E-03	-.1620E-11	.1369E-03
.1950E 02	.4124E-01	-.1276E-02	.1179E-08	.4863E-10	.1949E-03	-.1505E-11	.1369E-03
.1960E 02	.4111E-01	-.1276E-02	.1096E-08	.4504E-10	.1949E-03	-.1398E-11	.1369E-03
.1970E 02	.4098E-01	-.1276E-02	.1016E-08	.4172E-10	.1949E-03	-.1299E-11	.1369E-03
.1980E 02	.4086E-01	-.1276E-02	.9457E-09	.3864E-10	.1949E-03	-.1207E-11	.1369E-03
.1990E 02	.4073E-01	-.1276E-02	.8786E-09	.3578E-10	.1949E-03	-.1121E-11	.1369E-03

SPECTRUM AVERAGE CROSS SECTION = .1949E-03

MN-55 (N, 2N) MN-54  
U-235 FISSION SPECTRUM



MN-55(N,2N)MN-54  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1050E 02	.7765E-02	.8905E-01	.8191E-06	.6361E-08	.2863E-06	.7294E-07	.6638E-05
.1060E 02	.1667E-01	.6905E-01	.7627E-06	.1271E-07	.1251E-05	.6792E-07	.1368E-04
.1070E 02	.3137E-01	.1514E 00	.7101E-06	.2228E-07	.3003E-05	.1075E-06	.2453E-04
.1080E 02	.4651E-01	.1514E 00	.6611E-06	.3074E-07	.5669E-05	.1001E-06	.3490E-04
.1090E 02	.6766E-01	.2134E 00	.6154E-06	.4164E-07	.9302E-05	.1313E-06	.4842E-04
.1100E 02	.8900E-01	.2892E 00	.5729E-06	.5099E-07	.1395E-04	.1657E-06	.6114E-04
.1110E 02	.1179E 00	.2892E 00	.5333E-06	.6289E-07	.1967E-04	.1543E-06	.7712E-04
.1120E 02	.1468E 00	.2892E 00	.4965E-06	.7290E-07	.2648E-04	.1436E-06	.9201E-04
.1130E 02	.1758E 00	.2892E 00	.4621E-06	.8123E-07	.3420E-04	.1337E-06	.1059E-03
.1140E 02	.2079E 00	.3375E 00	.4301E-06	.8943E-07	.4273E-04	.1451E-06	.1202E-03
.1150E 02	.2417E 00	.3375E 00	.4003E-06	.9675E-07	.5205E-04	.1351E-06	.1342E-03
.1160E 02	.2754E 00	.3375E 00	.3726E-06	.1026E-06	.6204E-04	.1257E-06	.1472E-03
.1170E 02	.3089E 00	.3302E 00	.3468E-06	.1071E-06	.7254E-04	.1145E-06	.1593E-03
.1180E 02	.3420E 00	.3302E 00	.3227E-06	.1103E-06	.8342E-04	.1066E-06	.1703E-03
.1190E 02	.3750E 00	.3302E 00	.3003E-06	.1126E-06	.9458E-04	.9917E-07	.1806E-03
.1200E 02	.4080E 00	.2763E 00	.2795E-06	.1140E-06	.1059E-03	.7721E-07	.1901E-03
.1210E 02	.4356E 00	.2763E 00	.2600E-06	.1133E-06	.1173E-03	.7184E-07	.1976E-03
.1220E 02	.4633E 00	.2763E 00	.2420E-06	.1121E-06	.1286E-03	.6685E-07	.2045E-03
.1230E 02	.4909E 00	.2231E 00	.2251E-06	.1105E-06	.1397E-03	.6220E-07	.2110E-03
.1240E 02	.5149E 00	.2231E 00	.2095E-06	.1079E-06	.1506E-03	.4674E-07	.2162E-03
.1250E 02	.5373E 00	.2231E 00	.1949E-06	.1047E-06	.1613E-03	.4349E-07	.2207E-03
.1260E 02	.5596E 00	.2231E 00	.1813E-06	.1015E-06	.1716E-03	.4046E-07	.2249E-03
.1270E 02	.5806E 00	.1846E 00	.1687E-06	.9796E-07	.1815E-03	.3115E-07	.2286E-03
.1280E 02	.5991E 00	.1846E 00	.1570E-06	.9403E-07	.1911E-03	.2898E-07	.2316E-03
.1290E 02	.6175E 00	.1846E 00	.1460E-06	.9017E-07	.2003E-03	.2696E-07	.2344E-03
.1300E 02	.6360E 00	.1566E 00	.1353E-06	.8639E-07	.2092E-03	.2130E-07	.2370E-03
.1310E 02	.6517E 00	.1568E 00	.1264E-06	.8235E-07	.2176E-03	.1981E-07	.2390E-03
.1320E 02	.6674E 00	.1568E 00	.1175E-06	.7844E-07	.2256E-03	.1843E-07	.2409E-03
.1330E 02	.6830E 00	.1568E 00	.1093E-06	.7468E-07	.2333E-03	.1714E-07	.2427E-03
.1340E 02	.6971E 00	.1322E 00	.1017E-06	.7089E-07	.2406E-03	.1344E-07	.2442E-03
.1350E 02	.7103E 00	.1322E 00	.9459E-07	.6719E-07	.2475E-03	.1250E-07	.2455E-03
.1360E 02	.7235E 00	.1322E 00	.8798E-07	.6366E-07	.2540E-03	.1163E-07	.2467E-03
.1370E 02	.7360E 00	.1100E 00	.8183E-07	.6023E-07	.2602E-03	.9004E-08	.2477E-03
.1380E 02	.7470E 00	.1100E 00	.7611E-07	.5685E-07	.2661E-03	.8374E-08	.2486E-03
.1390E 02	.7580E 00	.1100E 00	.7078E-07	.5365E-07	.2716E-03	.7788E-08	.2494E-03
.1400E 02	.7690E 00	.8947E-01	.6583E-07	.5062E-07	.2768E-03	.5890E-08	.2502E-03
.1410E 02	.7779E 00	.8946E-01	.6122E-07	.4763E-07	.2817E-03	.5477E-08	.2507E-03
.1420E 02	.7869E 00	.8946E-01	.5693E-07	.4480E-07	.2863E-03	.5093E-08	.2513E-03
.1430E 02	.7958E 00	.8946E-01	.5294E-07	.4214E-07	.2907E-03	.4736E-08	.2518E-03
.1440E 02	.8036E 00	.7174E-01	.4923E-07	.3956E-07	.2947E-03	.3532E-08	.2522E-03
.1450E 02	.8108E 00	.7174E-01	.4578E-07	.3712E-07	.2986E-03	.3284E-08	.2525E-03
.1460E 02	.8179E 00	.7174E-01	.4257E-07	.3482E-07	.3022E-03	.3054E-08	.2528E-03
.1470E 02	.8247E 00	.5781E-01	.3959E-07	.3264E-07	.3055E-03	.2288E-08	.2531E-03
.1480E 02	.8304E 00	.5781E-01	.3681E-07	.3057E-07	.3087E-03	.2128E-08	.2533E-03
.1490E 02	.8362E 00	.5781E-01	.3422E-07	.2862E-07	.3117E-03	.1978E-08	.2535E-03
.1500E 02	.8420E 00	.4670E-01	.3182E-07	.2679E-07	.3144E-03	.1486E-08	.2537E-03
.1510E 02	.8467E 00	.4670E-01	.2959E-07	.2505E-07	.3170E-03	.1382E-08	.2538E-03
.1520E 02	.8513E 00	.4670E-01	.2751E-07	.2342E-07	.3194E-03	.1285E-08	.2540E-03
.1530E 02	.8560E 00	.4670E-01	.2558E-07	.2189E-07	.3217E-03	.1194E-08	.2541E-03
.1540E 02	.8601E 00	.3737E-01	.2378E-07	.2045E-07	.3238E-03	.8885E-09	.2542E-03

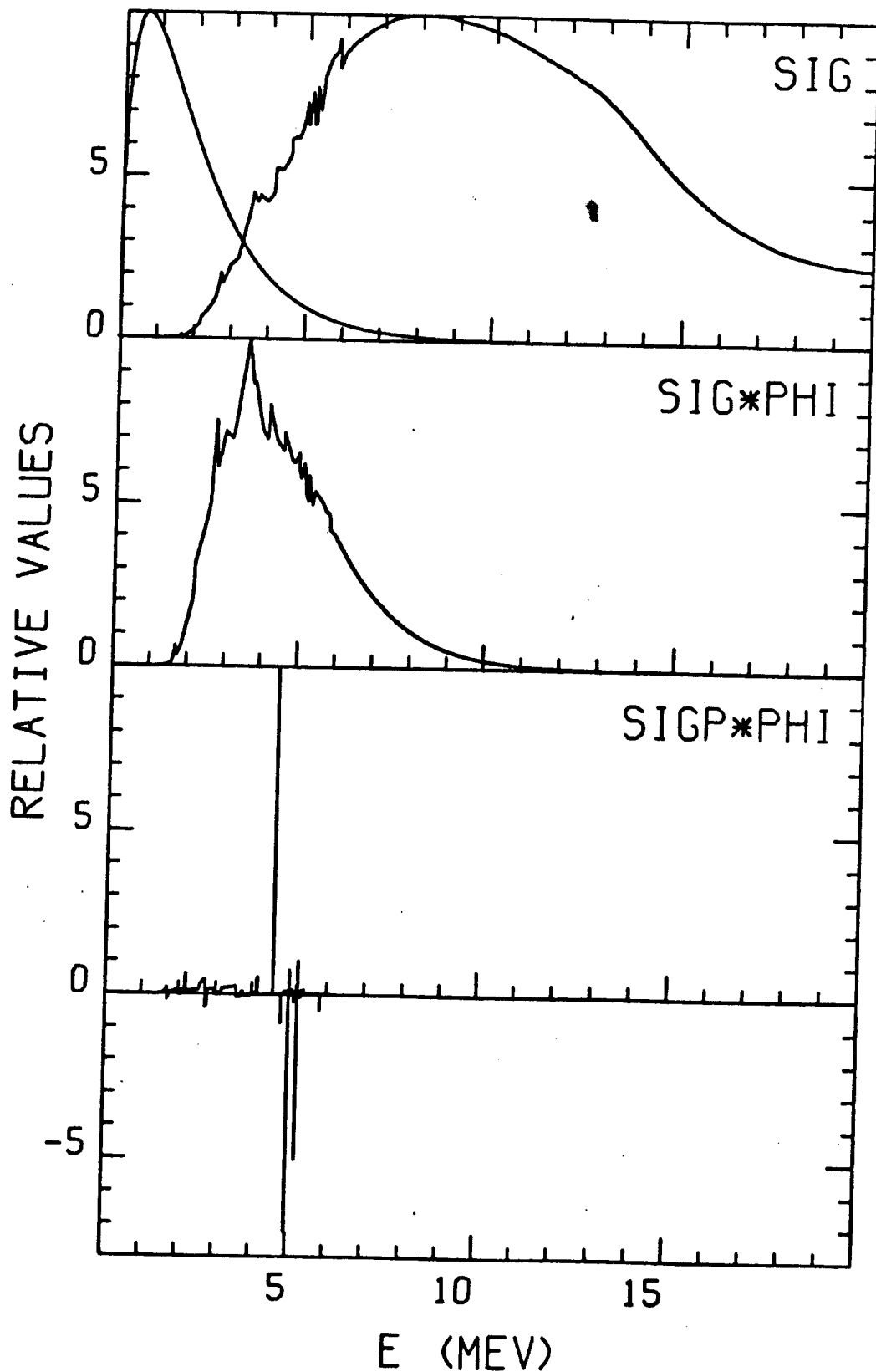
MN-55(N,2N)MN-54  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1550E 02	.8638E 00	.3737E-01	.2211E-07	.1909E-07	.3258E-03	.8260E-09	.2543E-03
.1560E 02	.8675E 00	.3737E-01	.2055E-07	.1783E-07	.3276E-03	.7679E-09	.2544E-03
.1570E 02	.8710E 00	.2994E-01	.1911E-07	.1664E-07	.3294E-03	.5720E-09	.2544E-03
.1580E 02	.8740E 00	.2994E-01	.1776E-07	.1552E-07	.3310E-03	.5318E-09	.2545E-03
.1590E 02	.8770E 00	.2994E-01	.1651E-07	.1448E-07	.3325E-03	.4943E-09	.2545E-03
.1600E 02	.8800E 00	.2026E-01	.1535E-07	.1351E-07	.3339E-03	.3202E-09	.2546E-03
.1610E 02	.8821E 00	.2055E-01	.1427E-07	.1259E-07	.3352E-03	.2975E-09	.2546E-03
.1620E 02	.8842E 00	.2055E-01	.1326E-07	.1173E-07	.3364E-03	.2766E-09	.2547E-03
.1630E 02	.8863E 00	.2055E-01	.1233E-07	.1093E-07	.3375E-03	.2571E-09	.2547E-03
.1640E 02	.8883E 00	.2055E-01	.1146E-07	.1018E-07	.3386E-03	.2390E-09	.2547E-03
.1650E 02	.8904E 00	.2055E-01	.1065E-07	.9484E-08	.3396E-03	.2221E-09	.2547E-03
.1660E 02	.8925E 00	.2055E-01	.9900E-08	.8836E-08	.3405E-03	.2065E-09	.2547E-03
.1670E 02	.8942E 00	.9760E-02	.9202E-08	.8229E-08	.3413E-03	.8981E-10	.2548E-03
.1680E 02	.8952E 00	.9760E-02	.8553E-08	.7657E-08	.3421E-03	.8347E-10	.2548E-03
.1690E 02	.8962E 00	.9760E-02	.7949E-08	.7124E-08	.3429E-03	.7758E-10	.2548E-03
.1700E 02	.8972E 00	.9760E-02	.7388E-08	.6628E-08	.3435E-03	.7211E-10	.2548E-03
.1710E 02	.8981E 00	.9760E-02	.6807E-08	.6167E-08	.3442E-03	.6702E-10	.2548E-03
.1720E 02	.8991E 00	.9760E-02	.6382E-08	.5738E-08	.3448E-03	.6229E-10	.2548E-03
.1730E 02	.9001E 00	.9760E-02	.5931E-08	.5339E-08	.3453E-03	.5789E-10	.2548E-03
.1740E 02	.9004E 00	-.6147E-03	.5512E-08	.4963E-08	.3458E-03	-.3388E-11	.2548E-03
.1750E 02	.9003E 00	-.6147E-03	.5123E-08	.4612E-08	.3463E-03	-.3149E-11	.2548E-03
.1760E 02	.9002E 00	-.6147E-03	.4761E-08	.4286E-08	.3468E-03	-.2926E-11	.2548E-03
.1770E 02	.9002E 00	-.6147E-03	.4424E-08	.3983E-08	.3472E-03	-.2719E-11	.2548E-03
.1780E 02	.9001E 00	-.6147E-03	.4111E-08	.3701E-08	.3476E-03	-.2527E-11	.2548E-03
.1790E 02	.9001E 00	-.6147E-03	.3821E-08	.3439E-08	.3479E-03	-.2348E-11	.2548E-03
.1800E 02	.9000E 00	-.1035E-01	.3550E-08	.3195E-08	.3482E-03	-.3675E-10	.2548E-03
.1810E 02	.8990E 00	-.1036E-01	.3299E-08	.2966E-08	.3486E-03	-.3418E-10	.2548E-03
.1820E 02	.8979E 00	-.1036E-01	.3066E-08	.2753E-08	.3488E-03	-.3176E-10	.2548E-03
.1830E 02	.8969E 00	-.1036E-01	.2849E-08	.2555E-08	.3491E-03	-.2951E-10	.2548E-03
.1840E 02	.8959E 00	-.1036E-01	.2647E-08	.2371E-08	.3494E-03	-.2742E-10	.2548E-03
.1850E 02	.8948E 00	-.1036E-01	.2460E-08	.2201E-08	.3496E-03	-.2548E-10	.2548E-03
.1860E 02	.8938E 00	-.1036E-01	.2286E-08	.2043E-08	.3498E-03	-.2368E-10	.2548E-03
.1870E 02	.8924E 00	-.2003E-01	.2124E-08	.1895E-08	.3500E-03	-.4254E-10	.2548E-03
.1880E 02	.8904E 00	-.2003E-01	.1973E-08	.1757E-08	.3502E-03	-.3952E-10	.2548E-03
.1890E 02	.8884E 00	-.2003E-01	.1833E-08	.1629E-08	.3503E-03	-.3672E-10	.2548E-03
.1900E 02	.8864E 00	-.2003E-01	.1703E-08	.1510E-08	.3505E-03	-.3412E-10	.2548E-03
.1910E 02	.8844E 00	-.2003E-01	.1583E-08	.1400E-08	.3506E-03	-.3170E-10	.2548E-03
.1920E 02	.8824E 00	-.2003E-01	.1471E-08	.1298E-08	.3508E-03	-.2945E-10	.2548E-03
.1930E 02	.8804E 00	-.2003E-01	.1366E-08	.1203E-08	.3509E-03	-.2737E-10	.2548E-03
.1940E 02	.8778E 00	-.2961E-01	.1269E-08	.1114E-08	.3510E-03	-.3759E-10	.2548E-03
.1950E 02	.8748E 00	-.2961E-01	.1179E-08	.1032E-08	.3511E-03	-.3492E-10	.2548E-03
.1960E 02	.8718E 00	-.2961E-01	.1096E-08	.9552E-09	.3512E-03	-.3244E-10	.2548E-03
.1970E 02	.8689E 00	-.2961E-01	.1018E-08	.8844E-09	.3513E-03	-.3014E-10	.2548E-03
.1980E 02	.8659E 00	-.2961E-01	.9457E-09	.8189E-09	.3514E-03	-.2600E-10	.2548E-03
.1990E 02	.8630E 00	-.2961E-01	.8786E-09	.7582E-09	.3515E-03	-.2601E-10	.2547E-03

SPECTRUM AVERAGE CROSS SECTION = .3516E-03



FE-54 (N, P) MN-54  
U-235 FISSION SPECTRUM



FE-54(N,P)MV-54  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.1300E 01	.2461E-04	.4472E-03	.3177E-03	.7818E-08	.2620E-06	.1421E-06	.8057E-05
.1400E 01	.1233E-03	.1293E-02	.3055E-03	.3767E-07	.2330E-05	.3950E-06	.3896E-04
.1500E 01	.3500E-03	.3371E-02	.2930E-03	.1026E-06	.8843E-05	.9879E-06	.1072E-03
.1600E 01	.9128E-03	.8792E-02	.2805E-03	.2560E-06	.2570E-04	.2466E-05	.2695E-03
.1700E 01	.4672E-02	.9414E-01	.2679E-03	.1305E-05	.8609E-04	.2522E-04	.1369E-02
.1800E 01	.4134E-02	.2660E-01	.2554E-03	.1056E-05	.1914E-03	.6794E-05	.1152E-02
.1900E 01	.7650E-02	.4795E-01	.2432E-03	.1909E-05	.3359E-03	.1166E-04	.2061E-02
.2000E 01	.1369E-01	.4918E-01	.2312E-03	.3166E-05	.5905E-03	.1137E-04	.3466E-02
.2100E 01	.1960E-01	.7038E-01	.2196E-03	.4303E-05	.9617E-03	.1545E-04	.4799E-02
.2200E 01	.3296E-01	.4009E 00	.2063E-03	.6865E-05	.1476E-02	.8349E-04	.7702E-02
.2300E 01	.4353E-01	.7607E-01	.1973E-03	.8590E-05	.2282E-02	.1501E-04	.9793E-02
.2400E 01	.5183E-01	.9058E-01	.1868E-03	.9682E-05	.3195E-02	.1692E-04	.1139E-01
.2500E 01	.6172E-01	.1079E 00	.1767E-03	.1090E-04	.4224E-02	.1906E-04	.1319E-01
.2600E 01	.7504E-01	.2730E 00	.1670E-03	.1253E-04	.5384E-02	.4557E-04	.1549E-01
.2700E 01	.1079E 00	.3924E 00	.1577E-03	.1701E-04	.6651E-02	.6188E-04	.2083E-01
.2800E 01	.1012E 00	.1456E 00	.1488E-03	.1505E-04	.8515E-02	.2167E-04	.1980E-01
.2900E 01	.1168E 00	.1641E 00	.1403E-03	.1639E-04	.1009E-01	.2359E-04	.2206E-01
.3000E 01	.1329E 00	.6183E-01	.1323E-03	.1758E-04	.1180E-01	.8177E-05	.2425E-01
.3100E 01	.1393E 00	.6477E-01	.1246E-03	.1735E-04	.1354E-01	.8069E-05	.2506E-01
.3200E 01	.1479E 00	.2292E 00	.1173E-03	.1735E-04	.1527E-01	.2688E-04	.2612E-01
.3300E 01	.1727E 00	.2675E 00	.1104E-03	.1906E-04	.1709E-01	.2953E-04	.2894E-01
.3400E 01	.2014E 00	.2958E 00	.1038E-03	.2091E-04	.1909E-01	.3072E-04	.3201E-01
.3500E 01	.2332E 00	.3426E 00	.9762E-04	.2277E-04	.2127E-01	.3345E-04	.3522E-01
.3600E 01	.2632E 00	-.1353E 00	.9175E-04	.2415E-04	.2364E-01	-.1241E-04	.3803E-01
.3700E 01	.2900E 00	-.1285E 00	.8619E-04	.2155E-04	.2592E-01	-.1107E-04	.3686E-01
.3800E 01	.2603E 00	-.6064E-01	.8095E-04	.2107E-04	.2805E-01	-.4908E-05	.3771E-01
.3900E 01	.2543E 00	-.5924E-01	.7599E-04	.1932E-04	.3007E-01	-.4502E-05	.3724E-01
.4000E 01	.2498E 00	.8478E-01	.7132E-04	.1782E-04	.3192E-01	.6046E-05	.3693E-01
.4100E 01	.2585E 00	.8771E-01	.6691E-04	.1729E-04	.3367E-01	.5869E-05	.3752E-01
.4200E 01	.3097E 00	-.1991E-01	.6276E-04	.1943E-04	.3548E-01	-.1249E-05	.4081E-01
.4300E 01	.3077E 00	-.1978E-01	.5884E-04	.1810E-04	.3736E-01	-.1164E-05	.4069E-01
.4400E 01	.3078E 00	.1197E 00	.5516E-04	.1698E-04	.3911E-01	.6602E-05	.4070E-01
.4500E 01	.3200E 00	.1244E 00	.5169E-04	.1654E-04	.4078E-01	.6432E-05	.4136E-01
.4600E 01	.3614E 00	.2864E-01	.4843E-04	.1750E-04	.4243E-01	.1387E-05	.4339E-01
.4700E 01	.3642E 00	.2887E-01	.4537E-04	.1652E-04	.4413E-01	.1310E-05	.4352E-01
.4800E 01	.3647E 00	.1875E 00	.4249E-04	.1550E-04	.4574E-01	.7967E-05	.4355E-01
.4900E 01	.3652E 00	.4328E 00	.3978E-04	.1532E-04	.4728E-01	.1722E-04	.4440E-01
.5000E 01	.3998E 00	-.2962E 00	.3724E-04	.1489E-04	.4884E-01	-.1103E-04	.4497E-01
.5100E 01	.4252E 00	.6009E 00	.3465E-04	.1482E-04	.5029E-01	.2094E-04	.4589E-01
.5200E 01	.3901E 00	.1143E 01	.3261E-04	.1272E-04	.5172E-01	.3726E-04	.4477E-01
.5300E 01	.4381E 00	-.4317E 00	.3051E-04	.1337E-04	.5308E-01	-.1317E-04	.4626E-01
.5400E 01	.4460E 00	.7149E 00	.2854E-04	.1273E-04	.5434E-01	.2040E-04	.4650E-01
.5500E 01	.4852E 00	.1824E 00	.2669E-04	.1295E-04	.5564E-01	.4867E-05	.4759E-01
.5600E 01	.5038E 00	.1844E 00	.2496E-04	.1257E-04	.5692E-01	.4725E-05	.4806E-01
.5700E 01	.5152E 00	.6841E-01	.2333E-04	.1202E-04	.5815E-01	.1596E-05	.4834E-01
.5800E 01	.5326E 00	.3064E 00	.2181E-04	.1162E-04	.5933E-01	.6682E-05	.4873E-01
.5900E 01	.5005E 00	.1954E 00	.2030E-04	.1020E-04	.6042E-01	.3983E-05	.4805E-01
.6000E 01	.5200E 00	.7079E-01	.1905E-04	.9906E-05	.6142E-01	.1349E-05	.4843E-01
.6100E 01	.5271E 00	.1776E-01	.1730E-04	.9383E-05	.6238E-01	.1277E-05	.4856E-01
.6200E 01	.5344E 00	.7274E-01	.1663E-04	.8886E-05	.6330E-01	.1210E-05	.4869E-01

FE-54(N,P)MN-54  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.6300E 01	.5408E 00	.5557E-01	.1553E-04	.8400E-05	.6416E-01	.8632E-06	.4879E-01
.6400E 01	.5464E 00	.5615E-01	.1451E-04	.7927E-05	.6498E-01	.8146E-06	.4887E-01
.6500E 01	.5520E 00	.5140E-01	.1355E-04	.7479E-05	.6575E-01	.6964E-06	.4895E-01
.6600E 01	.5572E 00	.5188E-01	.1265E-04	.7049E-05	.6647E-01	.6564E-06	.4902E-01
.6700E 01	.5624E 00	.5237E-01	.1181E-04	.6643E-05	.6716E-01	.6186E-06	.4908E-01
.6800E 01	.5666E 00	.5318E-01	.1103E-04	.6249E-05	.6780E-01	.3514E-06	.4913E-01
.6900E 01	.5698E 00	.3205E-01	.1029E-04	.5866E-05	.6841E-01	.3299E-06	.4917E-01
.7000E 01	.5730E 00	.3572E-01	.9604E-05	.5506E-05	.6898E-01	.3432E-06	.4920E-01
.7100E 01	.5766E 00	.3594E-01	.8968E-05	.5171E-05	.6951E-01	.3223E-06	.4923E-01
.7200E 01	.5802E 00	.3617E-01	.8369E-05	.4855E-05	.7001E-01	.3027E-06	.4926E-01
.7300E 01	.5828E 00	.1597E-01	.7809E-05	.4551E-05	.7048E-01	.1247E-06	.4928E-01
.7400E 01	.5844E 00	.1601E-01	.7286E-05	.4258E-05	.7092E-01	.1167E-06	.4930E-01
.7500E 01	.5860E 00	.1197E-01	.6797E-05	.3983E-05	.7133E-01	.8136E-07	.4931E-01
.7600E 01	.5872E 00	.1199E-01	.6341E-05	.3723E-05	.7172E-01	.7605E-07	.4932E-01
.7700E 01	.5884E 00	.1202E-01	.5914E-05	.3480E-05	.7208E-01	.7108E-07	.4932E-01
.7800E 01	.5892E 00	.3998E-02	.5516E-05	.3250E-05	.7241E-01	.2205E-07	.4933E-01
.7900E 01	.5896E 00	.4001E-02	.5144E-05	.3033E-05	.7273E-01	.2058E-07	.4933E-01
.8000E 01	.5900E 00	.4366E-07	.4797E-05	.2830E-05	.7302E-01	.2094E-12	.4933E-01
.8100E 01	.5900E 00	.0000E 00	.4473E-05	.2639E-05	.7329E-01	.0000E 00	.4933E-01
.8200E 01	.5900E 00	.0000E 00	.4171E-05	.2461E-05	.7355E-01	.0000E 00	.4933E-01
.8300E 01	.5898E 00	-.4002E-02	.3888E-05	.2293E-05	.7379E-01	-.1556E-07	.4933E-01
.8400E 01	.5894E 00	-.3999E-02	.3625E-05	.2137E-05	.7401E-01	-.1450E-07	.4933E-01
.8500E 01	.5890E 00	-.4003E-02	.3379E-05	.1990E-05	.7421E-01	-.1353E-07	.4933E-01
.8600E 01	.5886E 00	-.4001E-02	.3150E-05	.1854E-05	.7441E-01	-.1260E-07	.4933E-01
.8700E 01	.5882E 00	-.3998E-02	.2936E-05	.1727E-05	.7459E-01	-.1174E-07	.4932E-01
.8800E 01	.5870E 00	-.2005E-01	.2736E-05	.1606E-05	.7475E-01	-.5486E-07	.4932E-01
.8900E 01	.5850E 00	-.1998E-01	.2550E-05	.1492E-05	.7491E-01	-.5095E-07	.4932E-01
.9000E 01	.5830E 00	-.1606E-01	.2376E-05	.1385E-05	.7505E-01	-.3815E-07	.4931E-01
.9100E 01	.5814E 00	-.1601E-01	.2214E-05	.1287E-05	.7518E-01	-.3545E-07	.4931E-01
.9200E 01	.5798E 00	-.1597E-01	.2063E-05	.1196E-05	.7531E-01	-.3294E-07	.4930E-01
.9300E 01	.5782E 00	-.1603E-01	.1922E-05	.1111E-05	.7542E-01	-.3082E-07	.4930E-01
.9400E 01	.5766E 00	-.1599E-01	.1791E-05	.1033E-05	.7553E-01	-.2863E-07	.4930E-01
.9500E 01	.5750E 00	-.2009E-01	.1668E-05	.9593E-06	.7563E-01	-.3351E-07	.4930E-01
.9600E 01	.5730E 00	-.2002E-01	.1554E-05	.8905E-06	.7572E-01	-.3111E-07	.4929E-01
.9700E 01	.5710E 00	-.1995E-01	.1446E-05	.8266E-06	.7581E-01	-.2888E-07	.4929E-01
.9800E 01	.5688E 00	-.2408E-01	.1348E-05	.7670E-06	.7589E-01	-.3246E-07	.4929E-01
.9900E 01	.5664E 00	-.2397E-01	.1256E-05	.7114E-06	.7596E-01	-.3011E-07	.4928E-01
.1000E 02	.5640E 00	-.2413E-01	.1170E-05	.6597E-06	.7603E-01	-.2822E-07	.4928E-01
.1010E 02	.5616E 00	-.2403E-01	.1089E-05	.6118E-06	.7609E-01	-.2617E-07	.4928E-01
.1020E 02	.5592E 00	-.2392E-01	.1014E-05	.5673E-06	.7615E-01	-.2427E-07	.4927E-01
.1030E 02	.5562E 00	-.3617E-01	.9447E-06	.5254E-06	.7621E-01	-.3417E-07	.4927E-01
.1040E 02	.5526E 00	-.3594E-01	.8797E-06	.4861E-06	.7626E-01	-.3162E-07	.4927E-01
.1050E 02	.5490E 00	-.3630E-01	.8191E-06	.4497E-06	.7630E-01	-.2973E-07	.4927E-01
.1060E 02	.5454E 00	-.3606E-01	.7627E-06	.4159E-06	.7635E-01	-.2750E-07	.4926E-01
.1070E 02	.5418E 00	-.3582E-01	.7101E-06	.3847E-06	.7639E-01	-.2543E-07	.4926E-01
.1080E 02	.5384E 00	-.3214E-01	.6611E-06	.3559E-06	.7642E-01	-.2125E-07	.4926E-01
.1090E 02	.5352E 00	-.3195E-01	.6154E-06	.3294E-06	.7646E-01	-.1966E-07	.4926E-01
.1100E 02	.5320E 00	-.4038E-01	.5729E-06	.3048E-06	.7649E-01	-.2313E-07	.4925E-01
.1110E 02	.5280E 00	-.4007E-01	.5333E-06	.2816E-06	.7652E-01	-.2137E-07	.4925E-01
.1120E 02	.5240E 00	-.3977E-01	.4965E-06	.2601E-06	.7655E-01	-.1974E-07	.4925E-01

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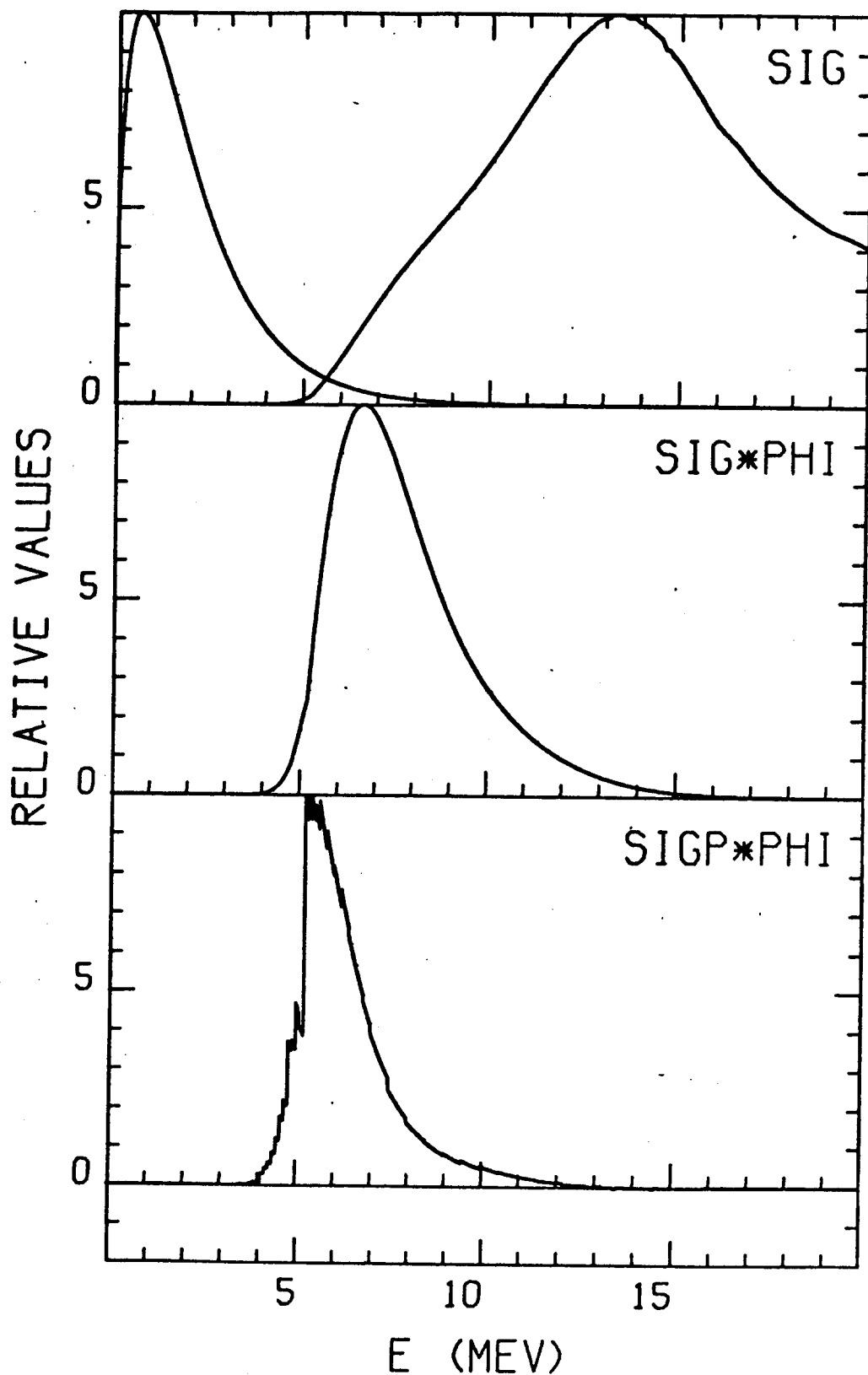
E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1130E 02	.5200E 00	-.4023E-01	.4621E-06	.2403E-06	.7657E-01	-.1859E-07	.4925E-01
.1140E 02	.5160E 00	-.3992E-01	.4301E-06	.2219E-06	.7659E-01	-.1717E-07	.4925E-01
.1150E 02	.5120E 00	-.4039E-01	.4003E-06	.2050E-06	.7662E-01	-.1617E-07	.4924E-01
.1160E 02	.5080E 00	-.4008E-01	.3726E-06	.1893E-06	.7664E-01	-.1493E-07	.4924E-01
.1170E 02	.5040E 00	-.3976E-01	.3468E-06	.1748E-06	.7665E-01	-.1379E-07	.4924E-01
.1180E 02	.5002E 00	-.3619E-01	.3227E-06	.1614E-06	.7667E-01	-.1168E-07	.4924E-01
.1190E 02	.4966E 00	-.3593E-01	.3003E-06	.1491E-06	.7669E-01	-.1079E-07	.4924E-01
.1200E 02	.4930E 00	-.5269E-01	.2795E-06	.1378E-06	.7670E-01	-.1472E-07	.4924E-01
.1210E 02	.4878E 00	-.5213E-01	.2600E-06	.1268E-06	.7671E-01	-.1356E-07	.4924E-01
.1220E 02	.4826E 00	-.5158E-01	.2420E-06	.1168E-06	.7673E-01	-.1248E-07	.4923E-01
.1230E 02	.4780E 00	-.4025E-01	.2251E-06	.1076E-06	.7674E-01	-.9062E-08	.4923E-01
.1240E 02	.4740E 00	-.3991E-01	.2095E-06	.9929E-07	.7675E-01	-.8361E-08	.4923E-01
.1250E 02	.4700E 00	-.4862E-01	.1949E-06	.9161E-07	.7676E-01	-.9476E-08	.4923E-01
.1260E 02	.4652E 00	-.4812E-01	.1813E-06	.8435E-07	.7677E-01	-.8726E-08	.4923E-01
.1270E 02	.4604E 00	-.4763E-01	.1687E-06	.7767E-07	.7677E-01	-.8035E-08	.4923E-01
.1280E 02	.4548E 00	-.6468E-01	.1574E-06	.7138E-07	.7678E-01	-.1015E-07	.4923E-01
.1290E 02	.4483E 00	-.6376E-01	.1460E-06	.6546E-07	.7679E-01	-.9311E-08	.4923E-01
.1300E 02	.4420E 00	-.6933E-01	.1358E-06	.6004E-07	.7679E-01	-.9418E-08	.4923E-01
.1310E 02	.4351E 00	-.6826E-01	.1264E-06	.5498E-07	.7680E-01	-.8625E-08	.4923E-01
.1320E 02	.4283E 00	-.6720E-01	.1175E-06	.5035E-07	.7681E-01	-.7898E-08	.4923E-01
.1330E 02	.4211E 00	-.7704E-01	.1093E-06	.4604E-07	.7681E-01	-.8423E-08	.4923E-01
.1340E 02	.4135E 00	-.7564E-01	.1017E-06	.4205E-07	.7681E-01	-.7693E-08	.4922E-01
.1350E 02	.4060E 00	-.7783E-01	.9459E-07	.3841E-07	.7682E-01	-.7362E-08	.4922E-01
.1360E 02	.3983E 00	-.7635E-01	.8798E-07	.3504E-07	.7682E-01	-.6718E-08	.4922E-01
.1370E 02	.3907E 00	-.7490E-01	.8183E-07	.3197E-07	.7683E-01	-.6129E-08	.4922E-01
.1380E 02	.3825E 00	-.8954E-01	.7611E-07	.2911E-07	.7683E-01	-.6814E-08	.4922E-01
.1390E 02	.3736E 00	-.8746E-01	.7076E-07	.2645E-07	.7683E-01	-.6191E-08	.4922E-01
.1400E 02	.3650E 00	-.8227E-01	.6583E-07	.2403E-07	.7683E-01	-.5416E-08	.4922E-01
.1410E 02	.3569E 00	-.8043E-01	.6122E-07	.2185E-07	.7684E-01	-.4924E-08	.4922E-01
.1420E 02	.3489E 00	-.7564E-01	.5693E-07	.1986E-07	.7684E-01	-.4477E-08	.4922E-01
.1430E 02	.3409E 00	-.8142E-01	.5294E-07	.1805E-07	.7684E-01	-.4311E-08	.4922E-01
.1440E 02	.3329E 00	-.7950E-01	.4923E-07	.1639E-07	.7684E-01	-.3914E-08	.4922E-01
.1450E 02	.3250E 00	-.7406E-01	.4578E-07	.1488E-07	.7684E-01	-.3391E-08	.4922E-01
.1460E 02	.3177E 00	-.7239E-01	.4257E-07	.1352E-07	.7684E-01	-.3082E-08	.4922E-01
.1470E 02	.3105E 00	-.7076E-01	.3959E-07	.1229E-07	.7685E-01	-.2801E-08	.4922E-01
.1480E 02	.3035E 00	-.6915E-01	.3681E-07	.1117E-07	.7685E-01	-.2545E-08	.4922E-01
.1490E 02	.2967E 00	-.6760E-01	.3422E-07	.1015E-07	.7685E-01	-.2313E-08	.4922E-01
.1500E 02	.2900E 00	-.6160E-01	.3182E-07	.9228E-08	.7685E-01	-.1960E-08	.4922E-01
.1510E 02	.2839E 00	-.6031E-01	.2959E-07	.8400E-08	.7685E-01	-.1784E-08	.4922E-01
.1520E 02	.2779E 00	-.5904E-01	.2751E-07	.7646E-08	.7685E-01	-.1624E-08	.4922E-01
.1530E 02	.2719E 00	-.6100E-01	.2556E-07	.6955E-08	.7685E-01	-.1560E-08	.4922E-01
.1540E 02	.2659E 00	-.5965E-01	.2378E-07	.6322E-08	.7685E-01	-.1418E-08	.4922E-01
.1550E 02	.2600E 00	-.5756E-01	.2211E-07	.5747E-08	.7685E-01	-.1272E-08	.4922E-01
.1560E 02	.2543E 00	-.5630E-01	.2055E-07	.5226E-08	.7685E-01	-.1157E-08	.4922E-01
.1570E 02	.2487E 00	-.5506E-01	.1911E-07	.4752E-08	.7685E-01	-.1052E-08	.4922E-01
.1580E 02	.2431E 00	-.5698E-01	.1776E-07	.4319E-08	.7685E-01	-.1012E-08	.4922E-01
.1590E 02	.2375E 00	-.5566E-01	.1651E-07	.3921E-08	.7686E-01	-.9190E-09	.4922E-01
.1600E 02	.2320E 00	-.4089E-01	.1535E-07	.3561E-08	.7686E-01	-.6276E-09	.4922E-01
.1610E 02	.2279E 00	-.4017E-01	.1427E-07	.3252E-08	.7686E-01	-.5731E-09	.4922E-01
.1620E 02	.2240E 00	-.3947E-01	.1326E-07	.2970E-08	.7686E-01	-.5234E-09	.4922E-01

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E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.1630E 02	.2195E 00	-.4680E-01	.1233E-07	.2707E-08	.7686E-01	-.6015E-09	.4922E-01
.1640E 02	.2147E 00	-.4772E-01	.1146E-07	.2460E-08	.7686E-01	-.5469E-09	.4922E-01
.1650E 02	.2100E 00	-.3263E-01	.1065E-07	.2237E-08	.7686E-01	-.3476E-09	.4922E-01
.1660E 02	.2068E 00	-.3212E-01	.9900E-08	.2047E-08	.7686E-01	-.3180E-09	.4922E-01
.1670E 02	.2036E 00	-.3162E-01	.9202E-08	.1873E-08	.7686E-01	-.2910E-09	.4922E-01
.1680E 02	.2000E 00	-.4061E-01	.8553E-08	.1710E-08	.7686E-01	-.3473E-09	.4922E-01
.1690E 02	.1959E 00	-.3979E-01	.7949E-08	.1558E-08	.7686E-01	-.3163E-09	.4922E-01
.1700E 02	.1920E 00	-.3269E-01	.7386E-08	.1419E-08	.7686E-01	-.2415E-09	.4922E-01
.1710E 02	.1888E 00	-.3213E-01	.6667E-08	.1296E-08	.7686E-01	-.2206E-09	.4922E-01
.1720E 02	.1856E 00	-.3159E-01	.6382E-08	.1184E-08	.7686E-01	-.2016E-09	.4921E-01
.1730E 02	.1824E 00	-.3242E-01	.5931E-08	.1082E-08	.7686E-01	-.1923E-09	.4921E-01
.1740E 02	.1792E 00	-.3185E-01	.5512E-08	.9875E-09	.7686E-01	-.1756E-09	.4921E-01
.1750E 02	.1760E 00	-.2442E-01	.5123E-08	.9016E-09	.7686E-01	-.1251E-09	.4921E-01
.1760E 02	.1736E 00	-.2408E-01	.4761E-08	.8263E-09	.7686E-01	-.1146E-09	.4921E-01
.1770E 02	.1712E 00	-.2375E-01	.4424E-08	.7573E-09	.7686E-01	-.1051E-09	.4921E-01
.1780E 02	.1690E 00	-.2016E-01	.4111E-08	.6948E-09	.7686E-01	-.8296E-10	.4921E-01
.1790E 02	.1670E 00	-.1944E-01	.3821E-08	.6380E-09	.7686E-01	-.7618E-10	.4921E-01
.1800E 02	.1650E 00	-.2031E-01	.3550E-08	.5858E-09	.7686E-01	-.7210E-10	.4921E-01
.1810E 02	.1630E 00	-.2006E-01	.3299E-08	.5377E-09	.7686E-01	-.6618E-10	.4921E-01
.1820E 02	.1610E 00	-.1941E-01	.3066E-08	.4935E-09	.7686E-01	-.6075E-10	.4921E-01
.1830E 02	.1592E 00	-.1612E-01	.2849E-08	.4535E-09	.7686E-01	-.4592E-10	.4921E-01
.1840E 02	.1576E 00	-.1596E-01	.2647E-08	.4172E-09	.7686E-01	-.4224E-10	.4921E-01
.1850E 02	.1560E 00	-.1621E-01	.2460E-08	.3837E-09	.7686E-01	-.3987E-10	.4921E-01
.1860E 02	.1544E 00	-.1604E-01	.2285E-08	.3529E-09	.7686E-01	-.3666E-10	.4921E-01
.1870E 02	.1528E 00	-.1587E-01	.2124E-08	.3245E-09	.7686E-01	-.3371E-10	.4921E-01
.1880E 02	.1514E 00	-.1207E-01	.1973E-08	.2987E-09	.7686E-01	-.2382E-10	.4921E-01
.1890E 02	.1502E 00	-.1198E-01	.1833E-08	.2754E-09	.7686E-01	-.2196E-10	.4921E-01
.1900E 02	.1490E 00	-.1212E-01	.1703E-08	.2538E-09	.7686E-01	-.2065E-10	.4921E-01
.1910E 02	.1478E 00	-.1202E-01	.1583E-08	.2339E-09	.7686E-01	-.1903E-10	.4921E-01
.1920E 02	.1466E 00	-.1193E-01	.1471E-08	.2156E-09	.7686E-01	-.1754E-10	.4921E-01
.1930E 02	.1456E 00	-.8033E-02	.1366E-08	.1989E-09	.7686E-01	-.1097E-10	.4921E-01
.1940E 02	.1448E 00	-.7989E-02	.1269E-08	.1838E-09	.7686E-01	-.1014E-10	.4921E-01
.1950E 02	.1440E 00	-.8056E-02	.1179E-08	.1698E-09	.7686E-01	-.9500E-11	.4921E-01
.1960E 02	.1432E 00	-.8011E-02	.1096E-08	.1569E-09	.7686E-01	-.8777E-11	.4921E-01
.1970E 02	.1424E 00	-.7966E-02	.1016E-08	.1449E-09	.7686E-01	-.8109E-11	.4921E-01
.1980E 02	.1418E 00	-.4008E-02	.9457E-09	.1341E-09	.7686E-01	-.3791E-11	.4921E-01
.1990E 02	.1414E 00	-.3997E-02	.8766E-09	.1242E-09	.7686E-01	-.3512E-11	.4921E-01

SPECTRUM AVERAGE CROSS SECTION = .7686E-01

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U-235 FISSION SPECTRUM



FE-56(N,P)MN-56  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.3000E 01	.1100E-06	.4001E-06	.1323E-03	.1455E-10	.2268E-09	.5291E-10	.1474E-07
.3100E 01	.1500E-06	.6000E-06	.1246E-03	.1869E-10	.1895E-08	.7475E-10	.1989E-07
.3200E 01	.2100E-06	.8500E-06	.1173E-03	.2463E-10	.4071E-08	.9970E-10	.2715E-07
.3300E 01	.2950E-06	.1250E-05	.1104E-03	.3256E-10	.6944E-08	.1380E-09	.3609E-07
.3400E 01	.4200E-06	.2000E-05	.1036E-03	.4361E-10	.1077E-07	.2077E-09	.5035E-07
.3500E 01	.6200E-06	.3600E-05	.9702E-04	.6053E-10	.1600E-07	.3514E-09	.7064E-07
.3600E 01	.9800E-06	.5200E-05	.9175E-04	.8991E-10	.2357E-07	.4771E-09	.1049E-06
.3700E 01	.1500E-05	.1000E-04	.8619E-04	.1293E-09	.3460E-07	.8619E-09	.1515E-06
.3800E 01	.2500E-05	.1900E-04	.8095E-04	.2024E-09	.5130E-07	.1538E-08	.2358E-06
.3900E 01	.4400E-05	.3600E-04	.7599E-04	.3344E-09	.7835E-07	.2736E-08	.3860E-06
.4000E 01	.6000E-05	.4000E-04	.7132E-04	.5705E-09	.1240E-06	.2853E-08	.6513E-06
.4100E 01	.1200E-04	.1700E-03	.6691E-04	.8029E-09	.1930E-06	.1137E-07	.9363E-06
.4200E 01	.2900E-04	.2700E-03	.6276E-04	.1820E-08	.3258E-06	.1694E-07	.2044E-05
.4300E 01	.5600E-04	.3700E-03	.5664E-04	.3295E-08	.5840E-06	.2177E-07	.3690E-05
.4400E 01	.9300E-04	.5700E-03	.5516E-04	.5130E-08	.1008E-05	.3144E-07	.5809E-05
.4500E 01	.1500E-03	.8800E-03	.5169E-04	.7754E-08	.1657E-05	.4549E-07	.8869E-05
.4600E 01	.2380E-03	.1370E-02	.4643E-04	.1153E-07	.2627E-05	.6635E-07	.1329E-04
.4700E 01	.3750E-03	.1600E-02	.4537E-04	.1701E-07	.4064E-05	.8166E-07	.1974E-04
.4800E 01	.5550E-03	.3250E-02	.4249E-04	.2356E-07	.6104E-05	.1381E-06	.2770E-04
.4900E 01	.8800E-03	.3500E-02	.3976E-04	.3501E-07	.9053E-05	.1392E-06	.4107E-04
.5000E 01	.1230E-02	.4700E-02	.3724E-04	.4580E-07	.1311E-04	.1750E-06	.5458E-04
.5100E 01	.1700E-02	.4400E-02	.3485E-04	.5925E-07	.1939E-04	.1533E-06	.7150E-04
.5200E 01	.2140E-02	.1140E-01	.3261E-04	.6979E-07	.2486E-04	.3717E-06	.8656E-04
.5300E 01	.3280E-02	.1220E-01	.3051E-04	.1001E-06	.3340E-04	.3722E-06	.1225E-03
.5400E 01	.4500E-02	.1300E-01	.2854E-04	.1264E-06	.4488E-04	.3710E-06	.1586E-03
.5500E 01	.5600E-02	.1360E-01	.2609E-04	.1548E-06	.5909E-04	.3630E-06	.1944E-03
.5600E 01	.7160E-02	.1470E-01	.2496E-04	.1787E-06	.7581E-04	.3669E-06	.2296E-03
.5700E 01	.8630E-02	.1470E-01	.2333E-04	.2014E-06	.9485E-04	.3430E-06	.2650E-03
.5800E 01	.1010E-01	.1550E-01	.2161E-04	.2203E-06	.1160E-03	.3381E-06	.2982E-03
.5900E 01	.1165E-01	.1550E-01	.2036E-04	.2375E-06	.1389E-03	.3160E-06	.3309E-03
.6000E 01	.1320E-01	.1600E-01	.1905E-04	.2515E-06	.1634E-03	.3048E-06	.3614E-03
.6100E 01	.1480E-01	.1600E-01	.1780E-04	.2634E-06	.1892E-03	.2848E-06	.3909E-03
.6200E 01	.1640E-01	.1700E-01	.1663E-04	.2727E-06	.2160E-03	.2827E-06	.4184E-03
.6300E 01	.1810E-01	.1700E-01	.1553E-04	.2812E-06	.2437E-03	.2641E-06	.4457E-03
.6400E 01	.1980E-01	.1650E-01	.1451E-04	.2873E-06	.2721E-03	.2394E-06	.4713E-03
.6500E 01	.2145E-01	.1650E-01	.1355E-04	.2906E-06	.3011E-03	.2236E-06	.4944E-03
.6600E 01	.2310E-01	.1650E-01	.1265E-04	.2923E-06	.3302E-03	.2088E-06	.5160E-03
.6700E 01	.2475E-01	.1650E-01	.1181E-04	.2924E-06	.3595E-03	.1949E-06	.5362E-03
.6800E 01	.2640E-01	.1600E-01	.1103E-04	.2912E-06	.3886E-03	.1765E-06	.5550E-03
.6900E 01	.2800E-01	.1600E-01	.1029E-04	.2883E-06	.4176E-03	.1647E-06	.5720E-03
.7000E 01	.2960E-01	.1520E-01	.9609E-05	.2844E-06	.4463E-03	.1461E-06	.5879E-03
.7100E 01	.3112E-01	.1520E-01	.8965E-05	.2791E-06	.4744E-03	.1363E-06	.6020E-03
.7200E 01	.3264E-01	.1520E-01	.8369E-05	.2732E-06	.5021E-03	.1272E-06	.6152E-03
.7300E 01	.3416E-01	.1520E-01	.7809E-05	.2667E-06	.5291E-03	.1187E-06	.6275E-03
.7400E 01	.3568E-01	.1520E-01	.7289E-05	.2600E-06	.5554E-03	.1107E-06	.6390E-03
.7500E 01	.3720E-01	.1360E-01	.6797E-05	.2528E-06	.5810E-03	.9244E-07	.6496E-03
.7600E 01	.3856E-01	.1360E-01	.6341E-05	.2445E-06	.6059E-03	.8623E-07	.6586E-03
.7700E 01	.3992E-01	.1360E-01	.5914E-05	.2361E-06	.6299E-03	.8043E-07	.6669E-03
.7800E 01	.4128E-01	.1360E-01	.5516E-05	.2277E-06	.6531E-03	.7502E-07	.6747E-03
.7900E 01	.4264E-01	.1360E-01	.5144E-05	.2194E-06	.6754E-03	.6996E-07	.6819E-03

FE-56(N,P)MN-56  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.8000E 01	.4400E-01	.1280E-01	.4797E-05	.2111E-06	.6970E-03	.6141E-07	.6887E-03
.8100E 01	.4528E-01	.1230E-01	.4473E-05	.2025E-06	.7176E-03	.5726E-07	.6946E-03
.8200E 01	.4656E-01	.1200E-01	.4171E-05	.1942E-06	.7375E-03	.5339E-07	.7001E-03
.8300E 01	.4784E-01	.1230E-01	.3888E-05	.1860E-06	.7565E-03	.4977E-07	.7053E-03
.8400E 01	.4912E-01	.1260E-01	.3625E-05	.1781E-06	.7747E-03	.4640E-07	.7101E-03
.8500E 01	.5040E-01	.1260E-01	.3377E-05	.1703E-06	.7921E-03	.4258E-07	.7146E-03
.8600E 01	.5166E-01	.1260E-01	.3150E-05	.1627E-06	.8087E-03	.3969E-07	.7187E-03
.8700E 01	.5292E-01	.1260E-01	.2938E-05	.1554E-06	.8246E-03	.3699E-07	.7225E-03
.8800E 01	.5416E-01	.1260E-01	.2736E-05	.1482E-06	.8398E-03	.3448E-07	.7261E-03
.8900E 01	.5544E-01	.1260E-01	.2550E-05	.1414E-06	.8543E-03	.3213E-07	.7294E-03
.9000E 01	.5670E-01	.1320E-01	.2376E-05	.1347E-06	.8681E-03	.3137E-07	.7325E-03
.9100E 01	.5802E-01	.1320E-01	.2214E-05	.1285E-06	.8812E-03	.2923E-07	.7355E-03
.9200E 01	.5934E-01	.1320E-01	.2063E-05	.1224E-06	.8938E-03	.2723E-07	.7383E-03
.9300E 01	.6066E-01	.1320E-01	.1922E-05	.1166E-06	.9057E-03	.2537E-07	.7410E-03
.9400E 01	.6198E-01	.1320E-01	.1791E-05	.1110E-06	.9171E-03	.2364E-07	.7434E-03
.9500E 01	.6330E-01	.1460E-01	.1668E-05	.1056E-06	.9279E-03	.2436E-07	.7457E-03
.9600E 01	.6476E-01	.1460E-01	.1554E-05	.1006E-06	.9382E-03	.2269E-07	.7481E-03
.9700E 01	.6622E-01	.1460E-01	.1443E-05	.9587E-07	.9481E-03	.2114E-07	.7502E-03
.9800E 01	.6768E-01	.1460E-01	.1348E-05	.9126E-07	.9574E-03	.1969E-07	.7523E-03
.9900E 01	.6914E-01	.1460E-01	.1256E-05	.8664E-07	.9663E-03	.1834E-07	.7542E-03
.1000E 02	.7060E-01	.1620E-01	.1176E-05	.8258E-07	.9748E-03	.1895E-07	.7560E-03
.1010E 02	.7222E-01	.1620E-01	.1089E-05	.7867E-07	.9828E-03	.1765E-07	.7578E-03
.1020E 02	.7384E-01	.1620E-01	.1014E-05	.7491E-07	.9905E-03	.1643E-07	.7595E-03
.1030E 02	.7546E-01	.1620E-01	.9447E-06	.7129E-07	.9978E-03	.1530E-07	.7611E-03
.1040E 02	.7708E-01	.1620E-01	.8797E-06	.6781E-07	.1005E-02	.1425E-07	.7625E-03
.1050E 02	.7870E-01	.1700E-01	.8191E-06	.6446E-07	.1011E-02	.1392E-07	.7639E-03
.1060E 02	.8040E-01	.1700E-01	.7627E-06	.6132E-07	.1018E-02	.1297E-07	.7653E-03
.1070E 02	.8210E-01	.1700E-01	.7101E-06	.5830E-07	.1024E-02	.1207E-07	.7665E-03
.1080E 02	.8380E-01	.1700E-01	.6611E-06	.5540E-07	.1029E-02	.1124E-07	.7677E-03
.1090E 02	.8550E-01	.1700E-01	.6154E-06	.5262E-07	.1035E-02	.1046E-07	.7688E-03
.1100E 02	.8720E-01	.1680E-01	.5729E-06	.4996E-07	.1040E-02	.9625E-08	.7698E-03
.1110E 02	.8888E-01	.1680E-01	.5333E-06	.4740E-07	.1045E-02	.8960E-08	.7707E-03
.1120E 02	.9056E-01	.1680E-01	.4965E-06	.4496E-07	.1049E-02	.8340E-08	.7716E-03
.1130E 02	.9224E-01	.1680E-01	.4621E-06	.4262E-07	.1054E-02	.7763E-08	.7724E-03
.1140E 02	.9392E-01	.1680E-01	.4301E-06	.4040E-07	.1058E-02	.7226E-08	.7731E-03
.1150E 02	.9560E-01	.1480E-01	.4003E-06	.3827E-07	.1062E-02	.5925E-08	.7738E-03
.1160E 02	.9708E-01	.1480E-01	.3726E-06	.3617E-07	.1066E-02	.5514E-08	.7744E-03
.1170E 02	.9856E-01	.1480E-01	.3468E-06	.3416E-07	.1069E-02	.5132E-08	.7749E-03
.1180E 02	.1000E 00	.1480E-01	.3227E-06	.3228E-07	.1072E-02	.4776E-08	.7754E-03
.1190E 02	.1015E 00	.1480E-01	.3003E-06	.3049E-07	.1075E-02	.4445E-08	.7759E-03
.1200E 02	.1030E 00	.1500E-01	.2795E-06	.2878E-07	.1078E-02	.4192E-08	.7763E-03
.1210E 02	.1045E 00	.1500E-01	.2600E-06	.2717E-07	.1081E-02	.3901E-08	.7767E-03
.1220E 02	.1060E 00	.1600E-01	.2426E-06	.2565E-07	.1084E-02	.2420E-08	.7771E-03
.1230E 02	.1070E 00	.1600E-01	.2251E-06	.2409E-07	.1086E-02	.2251E-08	.7773E-03
.1240E 02	.1080E 00	.1600E-01	.2095E-06	.2262E-07	.1089E-02	.2095E-08	.7775E-03
.1250E 02	.1090E 00	.1600E-01	.1949E-06	.2125E-07	.1091E-02	.1949E-08	.7777E-03
.1260E 02	.1100E 00	.1600E-01	.1813E-06	.1995E-07	.1093E-02	.1813E-08	.7779E-03
.1270E 02	.1110E 00	.1600E-01	.1687E-06	.1873E-07	.1095E-02	.1687E-08	.7781E-03
.1280E 02	.1120E 00	.5002E-02	.1570E-06	.1758E-07	.1097E-02	.7851E-09	.7783E-03
.1290E 02	.1125E 00	.5060E-02	.1460E-06	.1643E-07	.1098E-02	.7301E-09	.7783E-03



FE-56(N,P)K-56  
U-235 FISSION SPECTRUM

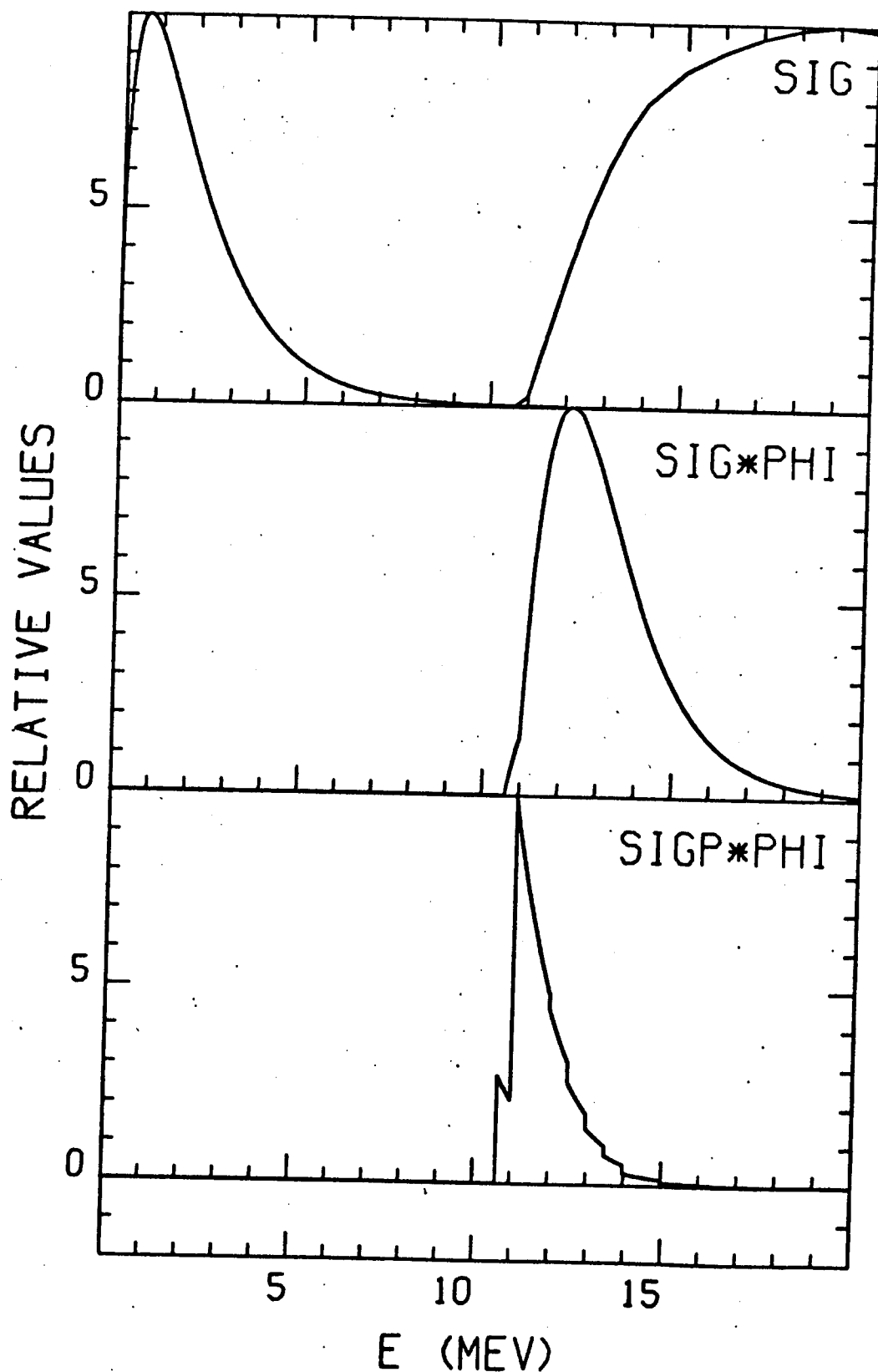
E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.1300E 02	.1130E 00	.2103E-05	.1353E-06	.1535E-07	.1100E-02	.2856E-12	.7784E-03
.1310E 02	.1130E 00	.9996E-02	.1264E-06	.1428E-07	.1101E-02	.1263E-08	.7784E-03
.1320E 02	.1140E 00	.4467E-05	.1175E-06	.1340E-07	.1103E-02	.5251E-12	.7785E-03
.1330E 02	.1140E 00	.2547E-07	.1093E-06	.1246E-07	.1104E-02	.2784E-14	.7785E-03
.1340E 02	.1140E 00	.0000E 00	.1017E-06	.1159E-07	.1105E-02	.0000E 00	.7785E-03
.1350E 02	.1140E 00	-.9995E-02	.9459E-07	.1078E-07	.1106E-02	-.9455E-09	.7785E-03
.1360E 02	.1130E 00	-.4649E-05	.8798E-07	.9942E-08	.1108E-02	-.4091E-12	.7784E-03
.1370E 02	.1130E 00	.0000E 00	.8183E-07	.9247E-08	.1108E-02	.0000E 00	.7784E-03
.1380E 02	.1130E 00	-.9995E-02	.7611E-07	.8600E-08	.1109E-02	-.7607E-09	.7784E-03
.1390E 02	.1120E 00	-.5002E-02	.7078E-07	.7928E-08	.1110E-02	-.3541E-09	.7784E-03
.1400E 02	.1115E 00	-.5000E-02	.6583E-07	.7340E-08	.1111E-02	-.3292E-09	.7783E-03
.1410E 02	.1110E 00	-.9998E-02	.6122E-07	.6796E-08	.1112E-02	-.6121E-09	.7783E-03
.1420E 02	.1100E 00	-.1000E-01	.5693E-07	.6263E-08	.1112E-02	-.5693E-09	.7782E-03
.1430E 02	.1090E 00	-.1000E-01	.5294E-07	.5771E-08	.1113E-02	-.5294E-09	.7782E-03
.1440E 02	.1080E 00	-.1000E-01	.4923E-07	.5317E-08	.1113E-02	-.4924E-09	.7781E-03
.1450E 02	.1070E 00	-.2999E-01	.4578E-07	.4899E-08	.1114E-02	-.1373E-08	.7781E-03
.1460E 02	.1040E 00	-.1598E-04	.4257E-07	.4428E-08	.1114E-02	-.6804E-12	.7780E-03
.1470E 02	.1040E 00	-.1999E-01	.3959E-07	.4117E-08	.1115E-02	-.7913E-09	.7780E-03
.1480E 02	.1020E 00	-.1001E-01	.3681E-07	.3754E-08	.1115E-02	-.3683E-09	.7779E-03
.1490E 02	.1010E 00	-.1600E-01	.3422E-07	.3457E-08	.1116E-02	-.5475E-09	.7778E-03
.1500E 02	.9940E-01	-.1740E-01	.3152E-07	.3163E-08	.1116E-02	-.5537E-09	.7778E-03
.1510E 02	.9766E-01	-.1740E-01	.2959E-07	.2889E-08	.1116E-02	-.5148E-09	.7777E-03
.1520E 02	.9592E-01	-.1740E-01	.2751E-07	.2639E-08	.1117E-02	-.4786E-09	.7777E-03
.1530E 02	.9418E-01	-.1740E-01	.2558E-07	.2409E-08	.1117E-02	-.4450E-09	.7776E-03
.1540E 02	.9244E-01	-.1740E-01	.2378E-07	.2198E-08	.1117E-02	-.4137E-09	.7776E-03
.1550E 02	.9070E-01	-.1760E-01	.2211E-07	.2005E-08	.1117E-02	-.3935E-09	.7776E-03
.1560E 02	.8892E-01	-.1760E-01	.2055E-07	.1827E-08	.1117E-02	-.3658E-09	.7775E-03
.1570E 02	.8714E-01	-.1780E-01	.1911E-07	.1665E-08	.1118E-02	-.3401E-09	.7775E-03
.1580E 02	.8536E-01	-.1780E-01	.1770E-07	.1516E-08	.1118E-02	-.3161E-09	.7775E-03
.1590E 02	.8358E-01	-.1780E-01	.1651E-07	.1380E-08	.1118E-02	-.2939E-09	.7774E-03
.1600E 02	.8180E-01	-.1120E-01	.1535E-07	.1255E-08	.1118E-02	-.1720E-09	.7774E-03
.1610E 02	.8068E-01	-.1120E-01	.1427E-07	.1151E-08	.1118E-02	-.1598E-09	.7774E-03
.1620E 02	.7956E-01	-.1120E-01	.1320E-07	.1055E-08	.1118E-02	-.1485E-09	.7774E-03
.1630E 02	.7844E-01	-.1120E-01	.1233E-07	.9670E-09	.1118E-02	-.1381E-09	.7773E-03
.1640E 02	.7732E-01	-.1120E-01	.1146E-07	.8860E-09	.1118E-02	-.1283E-09	.7773E-03
.1650E 02	.7620E-01	-.1400E-01	.1065E-07	.8116E-09	.1119E-02	-.1491E-09	.7773E-03
.1660E 02	.7480E-01	-.1400E-01	.9900E-08	.7405E-09	.1119E-02	-.1386E-09	.7773E-03
.1670E 02	.7340E-01	-.1400E-01	.9202E-08	.6754E-09	.1119E-02	-.1288E-09	.7773E-03
.1680E 02	.7200E-01	-.1400E-01	.8553E-08	.6158E-09	.1119E-02	-.1197E-09	.7773E-03
.1690E 02	.7060E-01	-.1400E-01	.7949E-08	.5612E-09	.1119E-02	-.1113E-09	.7773E-03
.1700E 02	.6920E-01	-.1140E-01	.7385E-08	.5113E-09	.1119E-02	-.8424E-10	.7773E-03
.1710E 02	.6806E-01	-.1140E-01	.6867E-08	.4673E-09	.1119E-02	-.7828E-10	.7772E-03
.1720E 02	.6692E-01	-.1140E-01	.6382E-08	.4271E-09	.1119E-02	-.7275E-10	.7772E-03
.1730E 02	.6578E-01	-.1140E-01	.5931E-08	.3901E-09	.1119E-02	-.6761E-10	.7772E-03
.1740E 02	.6464E-01	-.1140E-01	.5512E-08	.3563E-09	.1119E-02	-.6284E-10	.7772E-03
.1750E 02	.6350E-01	-.9202E-02	.5123E-08	.3253E-09	.1119E-02	-.4714E-10	.7772E-03
.1760E 02	.6236E-01	-.9200E-02	.4761E-08	.2979E-09	.1119E-02	-.4380E-10	.7772E-03
.1770E 02	.6166E-01	-.9200E-02	.4424E-08	.2728E-09	.1119E-02	-.4070E-10	.7772E-03
.1780E 02	.6074E-01	-.9200E-02	.4111E-08	.2497E-09	.1119E-02	-.3782E-10	.7772E-03
.1790E 02	.5982E-01	-.9200E-02	.3821E-08	.2285E-09	.1119E-02	-.3515E-10	.7772E-03

FE-56(N,P)MN-56  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.1800E 02	.5890E-01	-.8401E-02	.3550E-08	.2091E-09	.1119E-02	-.2963E-10	.7772E-03
.1810E 02	.5806E-01	-.8400E-02	.3299E-08	.1916E-09	.1119E-02	-.2771E-10	.7772E-03
.1820E 02	.5722E-01	-.8400E-02	.3066E-08	.1754E-09	.1119E-02	-.2575E-10	.7772E-03
.1830E 02	.5636E-01	-.8400E-02	.2849E-08	.1606E-09	.1119E-02	-.2393E-10	.7772E-03
.1840E 02	.5554E-01	-.8400E-02	.2647E-08	.1470E-09	.1119E-02	-.2224E-10	.7772E-03
.1850E 02	.5470E-01	-.8301E-02	.2460E-08	.1345E-09	.1119E-02	-.1673E-10	.7772E-03
.1860E 02	.5402E-01	-.6800E-02	.2266E-08	.1235E-09	.1119E-02	-.1554E-10	.7772E-03
.1870E 02	.5334E-01	-.6800E-02	.2124E-08	.1133E-09	.1119E-02	-.1444E-10	.7772E-03
.1880E 02	.5266E-01	-.6800E-02	.1973E-08	.1039E-09	.1119E-02	-.1342E-10	.7772E-03
.1890E 02	.5198E-01	-.6800E-02	.1833E-08	.9530E-10	.1119E-02	-.1247E-10	.7772E-03
.1900E 02	.5130E-01	-.4202E-02	.1703E-08	.8739E-10	.1119E-02	-.7158E-11	.7772E-03
.1910E 02	.5086E-01	-.4200E-02	.1593E-08	.8053E-10	.1119E-02	-.6647E-11	.7772E-03
.1920E 02	.5046E-01	-.4200E-02	.1471E-08	.7420E-10	.1119E-02	-.6176E-11	.7772E-03
.1930E 02	.5004E-01	-.4200E-02	.1366E-08	.6837E-10	.1119E-02	-.5738E-11	.7772E-03
.1940E 02	.4962E-01	-.4200E-02	.1269E-08	.6299E-10	.1119E-02	-.5331E-11	.7772E-03
.1950E 02	.4920E-01	-.5199E-02	.1179E-08	.5802E-10	.1119E-02	-.6131E-11	.7772E-03
.1960E 02	.4868E-01	-.5200E-02	.1096E-08	.5334E-10	.1119E-02	-.5697E-11	.7772E-03
.1970E 02	.4816E-01	-.5200E-02	.1018E-08	.4902E-10	.1119E-02	-.5293E-11	.7772E-03
.1980E 02	.4764E-01	-.5200E-02	.9457E-09	.4505E-10	.1119E-02	-.4918E-11	.7772E-03
.1990E 02	.4712E-01	-.5200E-02	.8786E-09	.4140E-10	.1119E-02	-.4568E-11	.7772E-03

SPECTRUM AVERAGE CROSS SECTION = .1119E-02

CO-59 (N, 2N) CO-58  
U-235 FISSION SPECTRUM



CU-59(N,2N)CU-58  
U-235 FISSION SPECTRUM

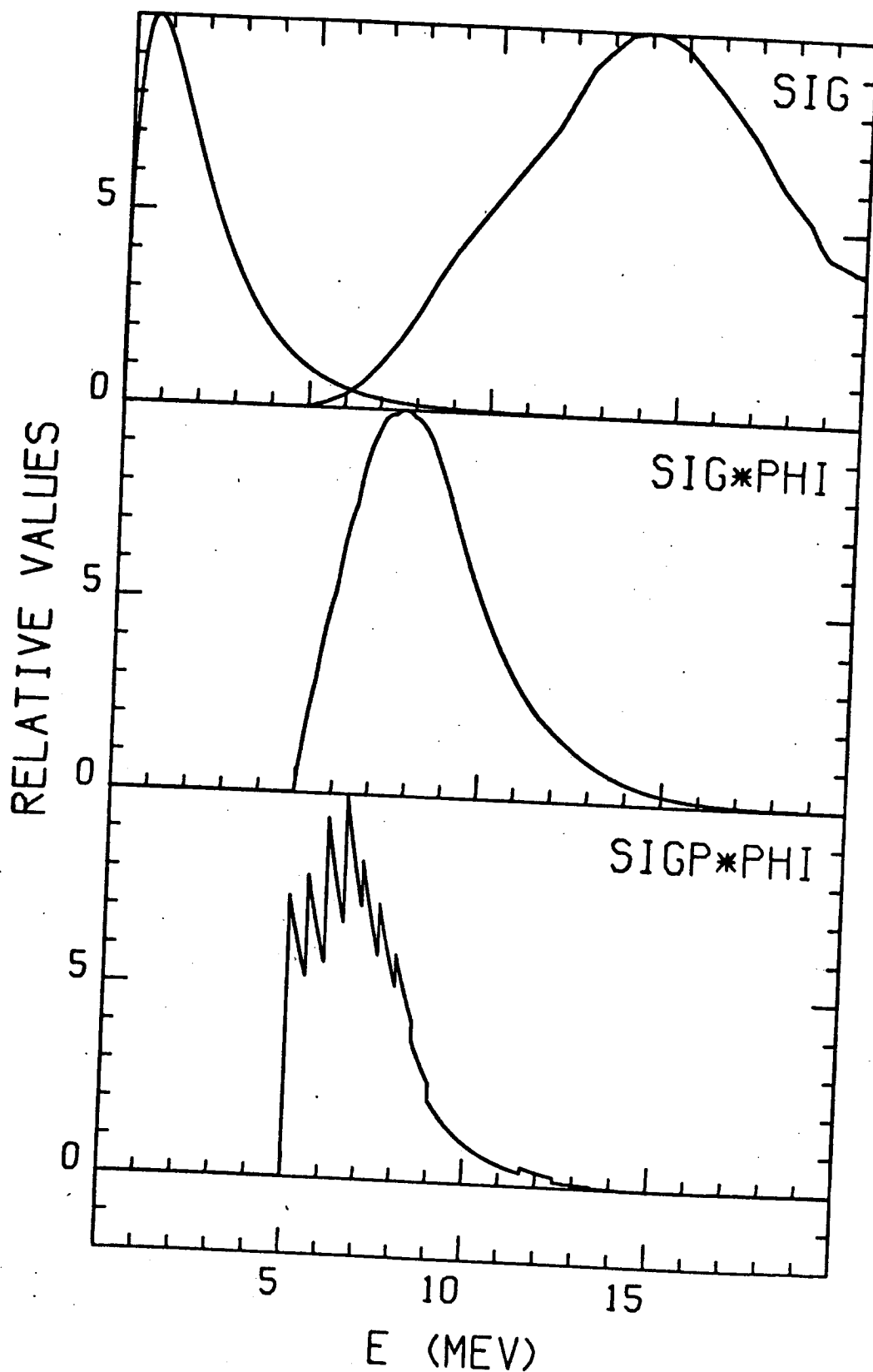
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.1070E 02	.3333E-02	.5556E-01	.7101E-06	.2367E-08	.7322E-07	.3945E-07	.2459E-05
.1080E 02	.5556E-02	.5556E-01	.6611E-06	.5876E-08	.4915E-06	.3673E-07	.6264E-05
.1090E 02	.1444E-01	.5556E-01	.6154E-06	.8890E-08	.1235E-05	.3419E-07	.9808E-05
.1100E 02	.2000E-01	.2599E 00	.5729E-06	.1146E-07	.2257E-05	.1409E-06	.1322E-04
.1110E 02	.4500E-01	.2600E 00	.5333E-06	.2453E-07	.4080E-05	.1387E-06	.2759E-04
.1120E 02	.7200E-01	.2600E 00	.4965E-06	.3574E-07	.7114E-05	.1291E-06	.4097E-04
.1130E 02	.9800E-01	.2600E 00	.4621E-06	.4529E-07	.1118E-04	.1201E-06	.5342E-04
.1140E 02	.1240E 00	.2600E 00	.4301E-06	.5333E-07	.1513E-04	.1118E-06	.6501E-04
.1150E 02	.1500E 00	.2600E 00	.4003E-06	.6005E-07	.2181E-04	.1041E-06	.7550E-04
.1160E 02	.1760E 00	.2600E 00	.3720E-06	.6557E-07	.2811E-04	.9687E-07	.8584E-04
.1170E 02	.2020E 00	.2600E 00	.3468E-06	.7004E-07	.3490E-04	.9016E-07	.9510E-04
.1180E 02	.2280E 00	.2600E 00	.3227E-06	.7358E-07	.4209E-04	.8390E-07	.1039E-03
.1190E 02	.2540E 00	.2600E 00	.3003E-06	.7628E-07	.4959E-04	.7808E-07	.1127E-03
.1200E 02	.2800E 00	.2400E 00	.2795E-06	.7825E-07	.5732E-04	.6707E-07	.1195E-03
.1210E 02	.3040E 00	.2400E 00	.2600E-06	.7905E-07	.6519E-04	.6241E-07	.1260E-03
.1220E 02	.3280E 00	.2400E 00	.2420E-06	.7937E-07	.7312E-04	.5807E-07	.1320E-03
.1230E 02	.3520E 00	.2400E 00	.2251E-06	.7925E-07	.8105E-04	.5404E-07	.1376E-03
.1240E 02	.3760E 00	.2400E 00	.2095E-06	.7877E-07	.8895E-04	.5028E-07	.1423E-03
.1250E 02	.4000E 00	.2600E 00	.1949E-06	.7796E-07	.9679E-04	.3899E-07	.1476E-03
.1260E 02	.4200E 00	.2000E 00	.1813E-06	.7616E-07	.1045E-03	.3627E-07	.1514E-03
.1270E 02	.4400E 00	.2000E 00	.1687E-06	.7423E-07	.1120E-03	.3374E-07	.1549E-03
.1280E 02	.4600E 00	.2000E 00	.1570E-06	.7220E-07	.1193E-03	.3139E-07	.1581E-03
.1290E 02	.4800E 00	.2000E 00	.1460E-06	.7009E-07	.1265E-03	.2920E-07	.1612E-03
.1300E 02	.5000E 00	.1600E 00	.1358E-06	.6792E-07	.1334E-03	.2174E-07	.1640E-03
.1310E 02	.5160E 00	.1600E 00	.1264E-06	.6520E-07	.1400E-03	.2022E-07	.1661E-03
.1320E 02	.5320E 00	.1600E 00	.1175E-06	.6253E-07	.1464E-03	.1881E-07	.1680E-03
.1330E 02	.5480E 00	.1600E 00	.1093E-06	.5992E-07	.1525E-03	.1749E-07	.1698E-03
.1340E 02	.5640E 00	.1600E 00	.1017E-06	.5736E-07	.1584E-03	.1627E-07	.1715E-03
.1350E 02	.5800E 00	.1200E 00	.9459E-07	.5487E-07	.1640E-03	.1135E-07	.1731E-03
.1360E 02	.5920E 00	.1200E 00	.8790E-07	.5209E-07	.1693E-03	.1056E-07	.1742E-03
.1370E 02	.6040E 00	.1200E 00	.8183E-07	.4943E-07	.1744E-03	.9820E-08	.1752E-03
.1380E 02	.6160E 00	.1200E 00	.7611E-07	.4688E-07	.1792E-03	.9133E-08	.1762E-03
.1390E 02	.6280E 00	.1200E 00	.7078E-07	.4445E-07	.1838E-03	.8494E-08	.1770E-03
.1400E 02	.6400E 00	.7000E-01	.6533E-07	.4213E-07	.1881E-03	.4610E-08	.1779E-03
.1410E 02	.6470E 00	.7000E-01	.6122E-07	.3961E-07	.1922E-03	.4285E-08	.1783E-03
.1420E 02	.6540E 00	.7000E-01	.5693E-07	.3723E-07	.1960E-03	.3985E-08	.1787E-03
.1430E 02	.6610E 00	.7000E-01	.5294E-07	.3500E-07	.1996E-03	.3706E-08	.1791E-03
.1440E 02	.6680E 00	.7000E-01	.4923E-07	.3289E-07	.2030E-03	.3446E-08	.1795E-03
.1450E 02	.6750E 00	.7000E-01	.4570E-07	.3090E-07	.2062E-03	.3205E-08	.1798E-03
.1460E 02	.6820E 00	.7000E-01	.4257E-07	.2903E-07	.2092E-03	.2980E-08	.1801E-03
.1470E 02	.6890E 00	.7000E-01	.3959E-07	.2727E-07	.2120E-03	.2771E-08	.1804E-03
.1480E 02	.6960E 00	.7000E-01	.3681E-07	.2562E-07	.2147E-03	.2577E-08	.1807E-03
.1490E 02	.7030E 00	.7000E-01	.3422E-07	.2406E-07	.2172E-03	.2396E-08	.1809E-03
.1500E 02	.7100E 00	.4000E-01	.3182E-07	.2259E-07	.2195E-03	.1273E-08	.1811E-03
.1510E 02	.7140E 00	.4000E-01	.2959E-07	.2113E-07	.2217E-03	.1183E-08	.1813E-03
.1520E 02	.7180E 00	.4000E-01	.2751E-07	.1975E-07	.2237E-03	.1100E-08	.1814E-03
.1530E 02	.7220E 00	.4000E-01	.2558E-07	.1847E-07	.2256E-03	.1023E-08	.1815E-03
.1540E 02	.7260E 00	.4000E-01	.2370E-07	.1726E-07	.2274E-03	.9511E-09	.1816E-03
.1550E 02	.7300E 00	.4000E-01	.2211E-07	.1614E-07	.2291E-03	.8842E-09	.1817E-03
.1560E 02	.7340E 00	.4000E-01	.2055E-07	.1508E-07	.2306E-03	.8220E-09	.1817E-03

C0-59(N,2N)C2-58  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.1570E 02	.7380E 00	.4000E-01	.1911E-07	.1410E-07	.2521E-03	.7642E-09	.1818E-03
.1580E 02	.7420E 00	.4000E-01	.1776E-07	.1318E-07	.2335E-03	.7104E-09	.1819E-03
.1590E 02	.7460E 00	.4000E-01	.1651E-07	.1232E-07	.2347E-03	.6604E-09	.1820E-03
.1600E 02	.7500E 00	.3001E-01	.1535E-07	.1151E-07	.2359E-03	.4605E-09	.1820E-03
.1610E 02	.7530E 00	.3000E-01	.1427E-07	.1074E-07	.2370E-03	.4280E-09	.1821E-03
.1620E 02	.7560E 00	.3000E-01	.1326E-07	.1003E-07	.2381E-03	.3979E-09	.1821E-03
.1630E 02	.7590E 00	.3000E-01	.1233E-07	.9357E-08	.2390E-03	.3698E-09	.1822E-03
.1640E 02	.7620E 00	.3000E-01	.1146E-07	.8732E-08	.2399E-03	.3438E-09	.1822E-03
.1650E 02	.7650E 00	.3000E-01	.1065E-07	.8148E-08	.2408E-03	.3195E-09	.1822E-03
.1660E 02	.7680E 00	.3000E-01	.9900E-08	.7603E-08	.2416E-03	.2970E-09	.1823E-03
.1670E 02	.7710E 00	.3000E-01	.9262E-08	.7095E-08	.2423E-03	.2761E-09	.1823E-03
.1680E 02	.7740E 00	.3000E-01	.8553E-08	.6620E-08	.2430E-03	.2566E-09	.1823E-03
.1690E 02	.7770E 00	.3000E-01	.7949E-08	.6177E-08	.2436E-03	.2385E-09	.1823E-03
.1700E 02	.7800E 00	.2001E-01	.7368E-08	.5763E-08	.2442E-03	.1478E-09	.1824E-03
.1710E 02	.7820E 00	.2000E-01	.6867E-08	.5370E-08	.2448E-03	.1373E-09	.1824E-03
.1720E 02	.7840E 00	.2000E-01	.6392E-08	.5003E-08	.2453E-03	.1276E-09	.1824E-03
.1730E 02	.7860E 00	.2000E-01	.5931E-08	.4662E-08	.2458E-03	.1186E-09	.1824E-03
.1740E 02	.7880E 00	.2000E-01	.5512E-08	.4344E-08	.2462E-03	.1102E-09	.1824E-03
.1750E 02	.7900E 00	.2000E-01	.5123E-08	.4047E-08	.2467E-03	.1025E-09	.1824E-03
.1760E 02	.7920E 00	.2000E-01	.4761E-08	.3770E-08	.2470E-03	.9521E-10	.1824E-03
.1770E 02	.7940E 00	.2000E-01	.4424E-08	.3513E-08	.2474E-03	.8848E-10	.1824E-03
.1780E 02	.7960E 00	.2000E-01	.4111E-08	.3273E-08	.2478E-03	.8223E-10	.1824E-03
.1790E 02	.7980E 00	.2000E-01	.3821E-08	.3049E-08	.2481E-03	.7641E-10	.1825E-03
.1800E 02	.8000E 00	.1001E-01	.3550E-08	.2840E-08	.2484E-03	.3553E-10	.1825E-03
.1810E 02	.8010E 00	.1000E-01	.3299E-08	.2643E-08	.2486E-03	.3299E-10	.1825E-03
.1820E 02	.8020E 00	.1000E-01	.3066E-08	.2459E-08	.2489E-03	.3066E-10	.1825E-03
.1830E 02	.8030E 00	.1000E-01	.2849E-08	.2286E-08	.2491E-03	.2849E-10	.1825E-03
.1840E 02	.8040E 00	.1000E-01	.2647E-08	.2126E-08	.2493E-03	.2647E-10	.1825E-03
.1850E 02	.8050E 00	.1000E-01	.2460E-08	.1980E-08	.2496E-03	.2460E-10	.1825E-03
.1860E 02	.8060E 00	.1000E-01	.2266E-08	.1842E-08	.2497E-03	.2266E-10	.1825E-03
.1870E 02	.8070E 00	.1000E-01	.2124E-08	.1714E-08	.2499E-03	.2124E-10	.1825E-03
.1880E 02	.8080E 00	.1000E-01	.1973E-08	.1594E-08	.2501E-03	.1973E-10	.1825E-03
.1890E 02	.8090E 00	.1000E-01	.1833E-08	.1483E-08	.2502E-03	.1833E-10	.1825E-03
.1900E 02	.8100E 00	-.9963E-02	.1703E-08	.1380E-08	.2504E-03	-.1701E-10	.1825E-03
.1910E 02	.8090E 00	-.1600E-01	.1583E-08	.1280E-08	.2505E-03	-.1583E-10	.1825E-03
.1920E 02	.8080E 00	-.1000E-01	.1471E-08	.1188E-08	.2506E-03	-.1471E-10	.1825E-03
.1930E 02	.8070E 00	-.1000E-01	.1366E-08	.1103E-08	.2508E-03	-.1366E-10	.1825E-03
.1940E 02	.8060E 00	-.1000E-01	.1259E-08	.1023E-08	.2509E-03	-.1269E-10	.1825E-03
.1950E 02	.8050E 00	-.1000E-01	.1179E-08	.9494E-09	.2510E-03	-.1179E-10	.1825E-03
.1960E 02	.8040E 00	-.1000E-01	.1096E-08	.8809E-09	.2511E-03	-.1096E-10	.1825E-03
.1970E 02	.8030E 00	-.1000E-01	.1018E-08	.8174E-09	.2511E-03	-.1018E-10	.1825E-03
.1980E 02	.8020E 00	-.1000E-01	.9457E-09	.7584E-09	.2512E-03	-.9457E-11	.1825E-03
.1990E 02	.8010E 00	-.1000E-01	.8786E-09	.7037E-09	.2513E-03	-.8786E-11	.1825E-03

SPECTRUM AVERAGE CROSS SECTION = .2514E-03

CO-59 (N, ALPHA) MN-56  
U-235 FISSION SPECTRUM



C0-59(N,ALPHA)RN-50  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.5100E 01	.8000E-04	.8000E-03	.3465E-04	.2788E-08	.1439E-06	.2788E-07	.2911E-05
.5200E 01	.1600E-03	.8000E-03	.3261E-04	.5218E-08	.5483E-06	.2609E-07	.5608E-05
.5300E 01	.2400E-03	.8000E-03	.3051E-04	.7322E-08	.1179E-05	.2441E-07	.8131E-05
.5400E 01	.3200E-03	.8000E-03	.2854E-04	.9132E-08	.2005E-05	.2283E-07	.1049E-04
.5500E 01	.4000E-03	.1200E-02	.2669E-04	.1068E-07	.2998E-05	.3203E-07	.1271E-04
.5600E 01	.5200E-03	.1200E-02	.2496E-04	.1298E-07	.4185E-05	.2995E-07	.1581E-04
.5700E 01	.6400E-03	.1200E-02	.2333E-04	.1493E-07	.5584E-05	.2800E-07	.1670E-04
.5800E 01	.7500E-03	.1200E-02	.2181E-04	.1658E-07	.7163E-05	.2617E-07	.2141E-04
.5900E 01	.8000E-03	.1200E-02	.2038E-04	.1794E-07	.8391E-05	.2446E-07	.2394E-04
.6000E 01	.1000E-02	.2000E-02	.1905E-04	.1905E-07	.1074E-04	.3810E-07	.2632E-04
.6100E 01	.1200E-02	.2000E-02	.1760E-04	.2136E-07	.1277E-04	.3560E-07	.3000E-04
.6200E 01	.1400E-02	.2000E-02	.1663E-04	.2328E-07	.1500E-04	.3326E-07	.3344E-04
.6300E 01	.1600E-02	.2000E-02	.1553E-04	.2485E-07	.1741E-04	.3107E-07	.3665E-04
.6400E 01	.1800E-02	.2000E-02	.1451E-04	.2612E-07	.1997E-04	.2902E-07	.3966E-04
.6500E 01	.2000E-02	.3000E-02	.1355E-04	.2710E-07	.2263E-04	.4065E-07	.4247E-04
.6600E 01	.2300E-02	.3000E-02	.1265E-04	.2910E-07	.2544E-04	.3796E-07	.4640E-04
.6700E 01	.2600E-02	.3000E-02	.1181E-04	.3071E-07	.2844E-04	.3544E-07	.5007E-04
.6800E 01	.2900E-02	.3000E-02	.1103E-04	.3198E-07	.3158E-04	.3309E-07	.5349E-04
.6900E 01	.3200E-02	.3000E-02	.1029E-04	.3294E-07	.3483E-04	.3088E-07	.5669E-04
.7000E 01	.3500E-02	.3500E-02	.9609E-05	.3363E-07	.3816E-04	.3363E-07	.5968E-04
.7100E 01	.3850E-02	.3500E-02	.8963E-05	.3453E-07	.4157E-04	.3139E-07	.6292E-04
.7200E 01	.4200E-02	.3500E-02	.8369E-05	.3515E-07	.4505E-04	.2929E-07	.6596E-04
.7300E 01	.4500E-02	.3500E-02	.7809E-05	.3553E-07	.4859E-04	.2733E-07	.6879E-04
.7400E 01	.4900E-02	.3500E-02	.7286E-05	.3570E-07	.5215E-04	.2550E-07	.7142E-04
.7500E 01	.5250E-02	.4300E-02	.6797E-05	.3568E-07	.5572E-04	.2923E-07	.7389E-04
.7600E 01	.5680E-02	.4300E-02	.6341E-05	.3601E-07	.5931E-04	.2726E-07	.7672E-04
.7700E 01	.6110E-02	.4300E-02	.5914E-05	.3614E-07	.6292E-04	.2543E-07	.7935E-04
.7800E 01	.6540E-02	.4300E-02	.5516E-05	.3608E-07	.6653E-04	.2372E-07	.8160E-04
.7900E 01	.6970E-02	.4300E-02	.5144E-05	.3586E-07	.7013E-04	.2212E-07	.8409E-04
.8000E 01	.7400E-02	.5000E-02	.4797E-05	.3550E-07	.7370E-04	.2399E-07	.8623E-04
.8100E 01	.7900E-02	.5000E-02	.4473E-05	.3534E-07	.7724E-04	.2237E-07	.8855E-04
.8200E 01	.8400E-02	.5000E-02	.4171E-05	.3503E-07	.8076E-04	.2085E-07	.9071E-04
.8300E 01	.8900E-02	.5000E-02	.3888E-05	.3461E-07	.8424E-04	.1944E-07	.9272E-04
.8400E 01	.9400E-02	.5000E-02	.3625E-05	.3408E-07	.8768E-04	.1813E-07	.9460E-04
.8500E 01	.9900E-02	.4400E-02	.3379E-05	.3345E-07	.9106E-04	.1487E-07	.9635E-04
.8600E 01	.1034E-01	.4400E-02	.3150E-05	.3257E-07	.9436E-04	.1386E-07	.9778E-04
.8700E 01	.1078E-01	.4400E-02	.2936E-05	.3165E-07	.9757E-04	.1292E-07	.9912E-04
.8800E 01	.1122E-01	.4400E-02	.2736E-05	.3070E-07	.1007E-03	.1204E-07	.1004E-03
.8900E 01	.1166E-01	.4400E-02	.2555E-05	.2973E-07	.1037E-03	.1122E-07	.1015E-03
.9000E 01	.1210E-01	.3654E-02	.2376E-05	.2875E-07	.1066E-03	.8683E-08	.1026E-03
.9100E 01	.1247E-01	.3654E-02	.2214E-05	.2760E-07	.1094E-03	.8090E-08	.1034E-03
.9200E 01	.1283E-01	.3654E-02	.2063E-05	.2647E-07	.1121E-03	.7538E-08	.1042E-03
.9300E 01	.1320E-01	.3654E-02	.1922E-05	.2537E-07	.1147E-03	.7023E-08	.1050E-03
.9400E 01	.1356E-01	.3654E-02	.1791E-05	.2429E-07	.1172E-03	.6543E-08	.1056E-03
.9500E 01	.1393E-01	.3654E-02	.1668E-05	.2323E-07	.1196E-03	.6096E-08	.1063E-03
.9600E 01	.1429E-01	.3654E-02	.1554E-05	.2221E-07	.1219E-03	.5679E-08	.1069E-03
.9700E 01	.1466E-01	.3654E-02	.1448E-05	.2122E-07	.1240E-03	.5290E-08	.1074E-03
.9800E 01	.1502E-01	.3654E-02	.1348E-05	.2026E-07	.1261E-03	.4927E-08	.1079E-03
.9900E 01	.1539E-01	.3654E-02	.1256E-05	.1933E-07	.1281E-03	.4589E-08	.1084E-03
.1000E 02	.1575E-01	.3654E-02	.1170E-05	.1843E-07	.1300E-03	.4274E-08	.1088E-03

CU-59(N,ALPHA)MN-56  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1010E 02	.1612E-01	.3654E-02	.1029E-05	.1756E-07	.1318E-03	.3980E-08	.1092E-03
.1020E 02	.1648E-01	.3654E-02	.1014E-05	.1672E-07	.1335E-03	.3707E-08	.1096E-03
.1030E 02	.1685E-01	.3654E-02	.9447E-06	.1592E-07	.1351E-03	.3452E-08	.1100E-03
.1040E 02	.1722E-01	.3654E-02	.6797E-06	.1514E-07	.1367E-03	.3214E-08	.1103E-03
.1050E 02	.1758E-01	.3654E-02	.8191E-06	.1440E-07	.1382E-03	.2993E-08	.1105E-03
.1060E 02	.1795E-01	.3654E-02	.7627E-06	.1369E-07	.1396E-03	.2787E-08	.1109E-03
.1070E 02	.1831E-01	.3654E-02	.7101E-06	.1300E-07	.1409E-03	.2594E-08	.1112E-03
.1080E 02	.1864E-01	.3654E-02	.6611E-06	.1235E-07	.1422E-03	.2415E-08	.1114E-03
.1090E 02	.1904E-01	.3654E-02	.6154E-06	.1172E-07	.1434E-03	.2249E-08	.1117E-03
.1100E 02	.1941E-01	.3654E-02	.5729E-06	.1112E-07	.1445E-03	.2093E-08	.1119E-03
.1110E 02	.1977E-01	.3654E-02	.5335E-06	.1055E-07	.1456E-03	.1949E-08	.1121E-03
.1120E 02	.2014E-01	.3654E-02	.4965E-06	.9998E-08	.1466E-03	.1814E-08	.1123E-03
.1130E 02	.2050E-01	.3654E-02	.4621E-06	.9475E-08	.1476E-03	.1688E-08	.1125E-03
.1140E 02	.2087E-01	.3654E-02	.4301E-06	.8976E-08	.1485E-03	.1572E-08	.1126E-03
.1150E 02	.2123E-01	.3654E-02	.4003E-06	.8501E-08	.1494E-03	.1463E-08	.1128E-03
.1160E 02	.2160E-01	.5222E-02	.3726E-06	.8048E-08	.1502E-03	.1346E-08	.1129E-03
.1170E 02	.2212E-01	.5222E-02	.3465E-06	.7671E-08	.1510E-03	.1211E-08	.1131E-03
.1180E 02	.2264E-01	.5222E-02	.3227E-06	.7307E-08	.1517E-03	.1085E-08	.1133E-03
.1190E 02	.2317E-01	.5222E-02	.3003E-06	.6957E-08	.1525E-03	.9568E-08	.1134E-03
.1200E 02	.2369E-01	.5222E-02	.2795E-06	.6620E-08	.1531E-03	.8259E-08	.1136E-03
.1210E 02	.2421E-01	.5222E-02	.2600E-06	.6296E-08	.1538E-03	.6958E-08	.1137E-03
.1220E 02	.2473E-01	.5222E-02	.2420E-06	.5985E-08	.1544E-03	.5644E-08	.1139E-03
.1230E 02	.2526E-01	.5222E-02	.2251E-06	.5686E-08	.1550E-03	.4317E-08	.1140E-03
.1240E 02	.2578E-01	.5222E-02	.2095E-06	.5400E-08	.1555E-03	.3044E-08	.1141E-03
.1250E 02	.2630E-01	.2801E-02	.1949E-06	.5126E-08	.1561E-03	.1749E-08	.1142E-03
.1260E 02	.2659E-01	.2800E-02	.1813E-06	.4820E-08	.1566E-03	.4507E-09	.1142E-03
.1270E 02	.2686E-01	.2800E-02	.1687E-06	.4532E-08	.1570E-03	.3244E-09	.1143E-03
.1280E 02	.2713E-01	.2571E-02	.1570E-06	.4258E-08	.1575E-03	.1936E-09	.1143E-03
.1290E 02	.2739E-01	.2571E-02	.1460E-06	.3999E-08	.1579E-03	.6755E-09	.1144E-03
.1300E 02	.2764E-01	.2571E-02	.1354E-06	.3755E-08	.1583E-03	.3493E-09	.1144E-03
.1310E 02	.2790E-01	.2500E-02	.1264E-06	.3525E-08	.1586E-03	.1599E-09	.1144E-03
.1320E 02	.2815E-01	.2500E-02	.1175E-06	.3309E-08	.1590E-03	.2939E-09	.1145E-03
.1330E 02	.2840E-01	.2500E-02	.1093E-06	.3105E-08	.1593E-03	.2733E-09	.1145E-03
.1340E 02	.2865E-01	.2500E-02	.1017E-06	.2914E-08	.1596E-03	.2543E-09	.1145E-03
.1350E 02	.2890E-01	.5723E-03	.9459E-07	.2734E-08	.1599E-03	.5414E-10	.1146E-03
.1360E 02	.2896E-01	.5714E-03	.8798E-07	.2548E-08	.1601E-03	.5028E-10	.1146E-03
.1370E 02	.2901E-01	.5714E-03	.8183E-07	.2374E-08	.1604E-03	.4676E-10	.1146E-03
.1380E 02	.2907E-01	.5714E-03	.7611E-07	.2213E-08	.1606E-03	.4349E-10	.1146E-03
.1390E 02	.2910E-01	.0000E 00	.7073E-07	.2060E-08	.1608E-03	.0000E 00	.1146E-03
.1400E 02	.2910E-01	.0000E 00	.6583E-07	.1916E-08	.1610E-03	.0000E 00	.1146E-03
.1410E 02	.2910E-01	.0000E 00	.6122E-07	.1782E-08	.1612E-03	.0000E 00	.1146E-03
.1420E 02	.2910E-01	.0000E 00	.5693E-07	.1657E-08	.1614E-03	.0000E 00	.1146E-03
.1430E 02	.2906E-01	-.8000E-03	.5294E-07	.1539E-08	.1615E-03	-.4236E-10	.1146E-03
.1440E 02	.2898E-01	-.8000E-03	.4923E-07	.1427E-08	.1617E-03	-.3939E-10	.1146E-03
.1450E 02	.2890E-01	-.1799E-02	.4578E-07	.1323E-08	.1618E-03	-.8239E-10	.1146E-03
.1460E 02	.2872E-01	-.1800E-02	.4257E-07	.1223E-08	.1619E-03	-.7663E-10	.1146E-03
.1470E 02	.2854E-01	-.1300E-02	.3959E-07	.1130E-08	.1621E-03	-.7125E-10	.1145E-03
.1480E 02	.2836E-01	-.1200E-02	.3651E-07	.1044E-08	.1622E-03	-.6626E-10	.1145E-03
.1490E 02	.2818E-01	-.1100E-02	.3422E-07	.9645E-09	.1623E-03	-.6160E-10	.1145E-03
.1500E 02	.2800E-01	-.3199E-02	.3182E-07	.8910E-09	.1624E-03	-.1018E-09	.1145E-03

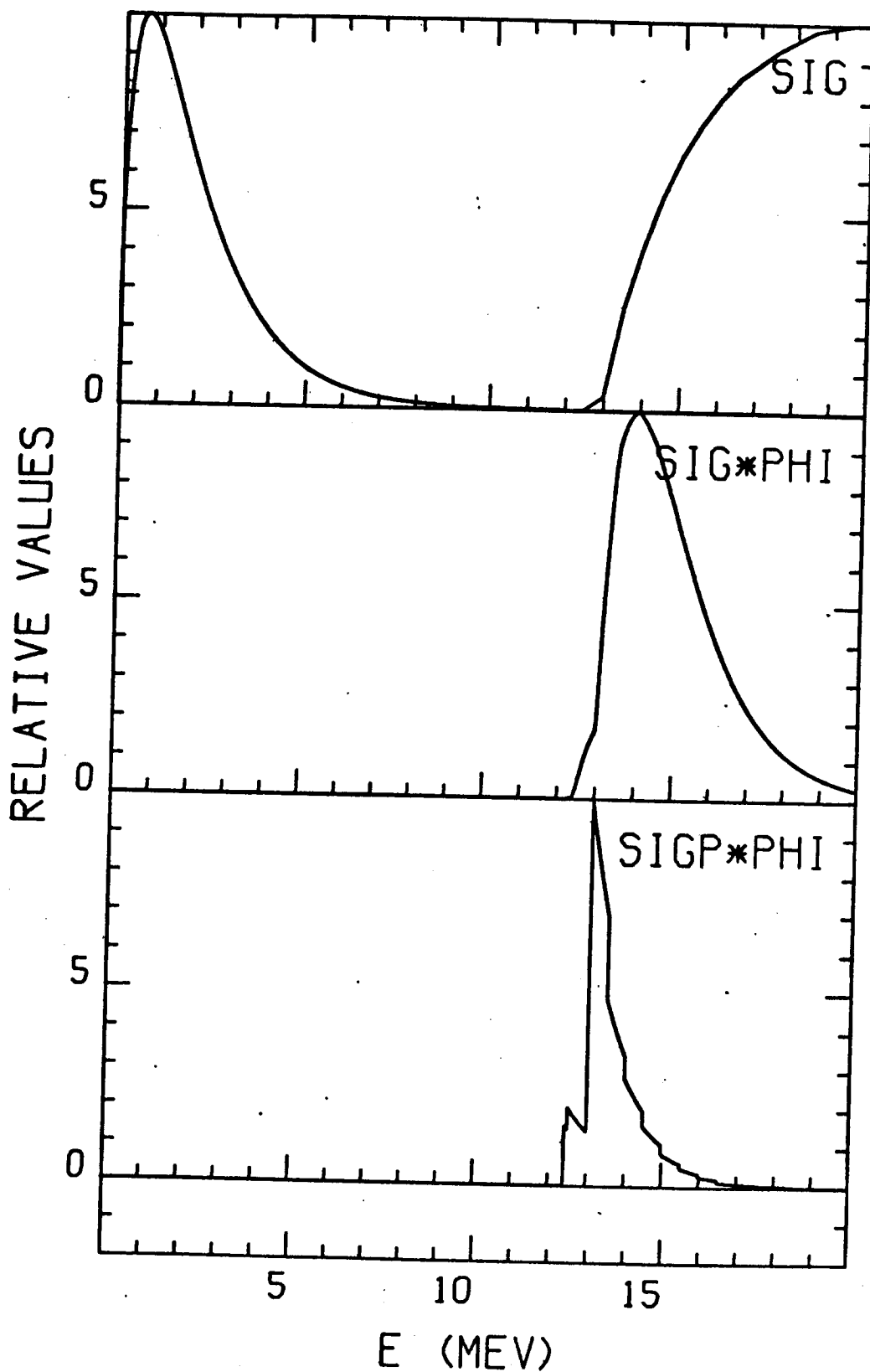


CG-59(N,ALPHA)MN-56  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1510E 02	.2766E-01	-.3200E-02	.2959E-07	.8190E-09	.1625E-03	-.9468E-10	.1145E-03
.1520E 02	.2736E-01	-.3200E-02	.2751E-07	.7526E-09	.1625E-03	-.8803E-10	.1145E-03
.1530E 02	.2704E-01	-.3200E-02	.2550E-07	.6916E-09	.1626E-03	-.8184E-10	.1145E-03
.1540E 02	.2672E-01	-.3200E-02	.2376E-07	.6353E-09	.1627E-03	-.7609E-10	.1145E-03
.1550E 02	.2640E-01	-.3200E-02	.2211E-07	.5836E-09	.1627E-03	-.7074E-10	.1145E-03
.1560E 02	.2608E-01	-.3200E-02	.2055E-07	.5360E-09	.1628E-03	-.6576E-10	.1145E-03
.1570E 02	.2576E-01	-.3200E-02	.1911E-07	.4922E-09	.1628E-03	-.6114E-10	.1145E-03
.1580E 02	.2544E-01	-.3200E-02	.1776E-07	.4518E-09	.1629E-03	-.5683E-10	.1145E-03
.1590E 02	.2512E-01	-.3200E-02	.1651E-07	.4147E-09	.1629E-03	-.5283E-10	.1145E-03
.1600E 02	.2480E-01	-.3600E-02	.1535E-07	.3806E-09	.1630E-03	-.5525E-10	.1145E-03
.1610E 02	.2444E-01	-.3600E-02	.1427E-07	.3487E-09	.1630E-03	-.5136E-10	.1145E-03
.1620E 02	.2408E-01	-.3600E-02	.1326E-07	.3194E-09	.1630E-03	-.4774E-10	.1144E-03
.1630E 02	.2372E-01	-.3600E-02	.1233E-07	.2924E-09	.1631E-03	-.4438E-10	.1144E-03
.1640E 02	.2336E-01	-.3600E-02	.1146E-07	.2677E-09	.1631E-03	-.4125E-10	.1144E-03
.1650E 02	.2300E-01	-.3600E-02	.1065E-07	.2450E-09	.1631E-03	-.3834E-10	.1144E-03
.1660E 02	.2264E-01	-.3600E-02	.9900E-08	.2241E-09	.1631E-03	-.3564E-10	.1144E-03
.1670E 02	.2228E-01	-.3600E-02	.9202E-08	.2050E-09	.1632E-03	-.3313E-10	.1144E-03
.1680E 02	.2192E-01	-.3600E-02	.8553E-08	.1875E-09	.1632E-03	-.3079E-10	.1144E-03
.1690E 02	.2156E-01	-.3600E-02	.7949E-08	.1714E-09	.1632E-03	-.2862E-10	.1144E-03
.1700E 02	.2120E-01	-.4799E-02	.7388E-08	.1566E-09	.1632E-03	-.3546E-10	.1144E-03
.1710E 02	.2072E-01	-.4800E-02	.6867E-08	.1423E-09	.1632E-03	-.3296E-10	.1144E-03
.1720E 02	.2024E-01	-.4800E-02	.6382E-08	.1292E-09	.1632E-03	-.3063E-10	.1144E-03
.1730E 02	.1976E-01	-.4800E-02	.5931E-08	.1172E-09	.1633E-03	-.2847E-10	.1144E-03
.1740E 02	.1928E-01	-.4800E-02	.5512E-08	.1063E-09	.1633E-03	-.2646E-10	.1144E-03
.1750E 02	.1880E-01	-.4400E-02	.5123E-08	.9631E-10	.1633E-03	-.2254E-10	.1144E-03
.1760E 02	.1836E-01	-.4400E-02	.4761E-08	.8741E-10	.1633E-03	-.2095E-10	.1144E-03
.1770E 02	.1792E-01	-.4400E-02	.4424E-08	.7928E-10	.1633E-03	-.1947E-10	.1144E-03
.1780E 02	.1753E-01	-.3333E-02	.4111E-08	.7209E-10	.1633E-03	-.1370E-10	.1144E-03
.1790E 02	.1720E-01	-.3333E-02	.3821E-08	.6571E-10	.1633E-03	-.1274E-10	.1144E-03
.1800E 02	.1687E-01	-.3333E-02	.3555E-08	.5988E-10	.1633E-03	-.1183E-10	.1144E-03
.1810E 02	.1653E-01	-.3333E-02	.3299E-08	.5455E-10	.1633E-03	-.1100E-10	.1144E-03
.1820E 02	.1620E-01	-.3333E-02	.3065E-08	.4967E-10	.1633E-03	-.1022E-10	.1144E-03
.1830E 02	.1587E-01	-.3333E-02	.2849E-08	.4520E-10	.1633E-03	-.9496E-11	.1144E-03
.1840E 02	.1553E-01	-.3333E-02	.2647E-08	.4112E-10	.1633E-03	-.8824E-11	.1144E-03
.1850E 02	.1520E-01	-.5998E-02	.2460E-08	.3739E-10	.1633E-03	-.1475E-10	.1144E-03
.1860E 02	.1460E-01	-.6000E-02	.2286E-08	.3337E-10	.1633E-03	-.1371E-10	.1144E-03
.1870E 02	.1400E-01	-.6000E-02	.2124E-08	.2973E-10	.1633E-03	-.1274E-10	.1144E-03
.1880E 02	.1350E-01	-.4000E-02	.1973E-08	.2664E-10	.1634E-03	-.7693E-11	.1144E-03
.1890E 02	.1310E-01	-.4000E-02	.1833E-08	.2402E-10	.1634E-03	-.7334E-11	.1144E-03
.1900E 02	.1270E-01	-.1302E-02	.1703E-08	.2163E-10	.1634E-03	-.2218E-11	.1144E-03
.1910E 02	.1237E-01	-.1300E-02	.1583E-08	.1989E-10	.1634E-03	-.2058E-11	.1144E-03
.1920E 02	.1244E-01	-.1300E-02	.1471E-08	.1829E-10	.1634E-03	-.1912E-11	.1144E-03
.1930E 02	.1231E-01	-.1300E-02	.1366E-08	.1682E-10	.1634E-03	-.1776E-11	.1144E-03
.1940E 02	.1218E-01	-.1300E-02	.1269E-08	.1546E-10	.1634E-03	-.1650E-11	.1144E-03
.1950E 02	.1205E-01	-.1300E-02	.1179E-08	.1421E-10	.1634E-03	-.1533E-11	.1144E-03
.1960E 02	.1192E-01	-.1300E-02	.1096E-08	.1306E-10	.1634E-03	-.1424E-11	.1144E-03
.1970E 02	.1179E-01	-.1300E-02	.1018E-08	.1200E-10	.1634E-03	-.1323E-11	.1144E-03
.1980E 02	.1166E-01	-.1300E-02	.9457E-09	.1103E-10	.1634E-03	-.1229E-11	.1144E-03
.1990E 02	.1153E-01	-.1300E-02	.8788E-09	.1013E-10	.1634E-03	-.1142E-11	.1144E-03

SPECTRUM AVERAGE CROSS SECTION = .1634E-03

NI-58(N, 2N) NI-57  
U-235 FISSION SPECTRUM



NI-235(N,2N)NI-57  
U-235 FISSION SPECTRUM

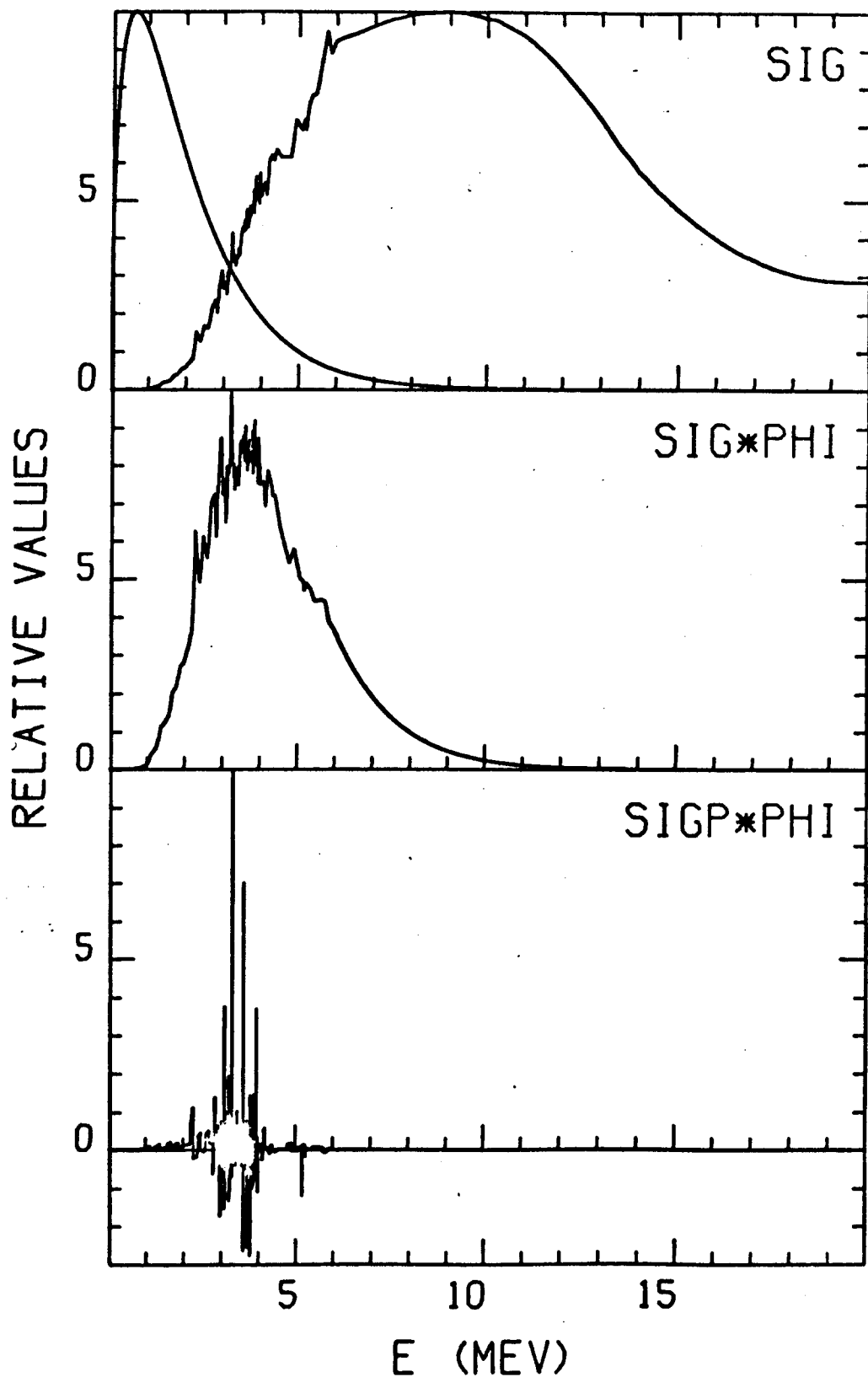
E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.1250E 02	.2230E-03	.3654E-02	.1949E-06	.4347E-10	.1898E-08	.7121E-09	.4555E-07
.1260E 02	.5384E-03	.3654E-02	.1813E-06	.1067E-09	.2518E-08	.6626E-09	.1142E-06
.1270E 02	.9538E-03	.3654E-02	.1667E-06	.1609E-09	.2300E-07	.6165E-09	.1781E-06
.1280E 02	.1319E-02	.3654E-02	.1570E-06	.2071E-09	.4148E-07	.5735E-09	.2376E-06
.1290E 02	.1685E-02	.3654E-02	.1463E-06	.2460E-09	.6421E-07	.5335E-09	.2929E-06
.1300E 02	.2050E-02	.2589E-01	.1358E-06	.2785E-09	.9050E-07	.3517E-08	.3474E-06
.1310E 02	.4640E-02	.2590E-01	.1264E-06	.5863E-09	.1343E-06	.3273E-08	.6860E-06
.1320E 02	.7230E-02	.2590E-01	.1175E-06	.8493E-09	.2066E-06	.3044E-08	.1002E-05
.1330E 02	.9820E-02	.2590E-01	.1093E-06	.1074E-08	.3032E-06	.2832E-08	.1296E-05
.1340E 02	.1241E-01	.2590E-01	.1017E-06	.1262E-08	.4203E-06	.2634E-08	.1569E-05
.1350E 02	.1500E-01	.1800E-01	.9459E-07	.1419E-08	.5547E-06	.1703E-08	.1822E-05
.1360E 02	.1680E-01	.1800E-01	.8790E-07	.1478E-08	.6997E-06	.1584E-08	.1986E-05
.1370E 02	.1860E-01	.1800E-01	.8133E-07	.1522E-08	.8499E-06	.1473E-08	.2139E-05
.1380E 02	.2040E-01	.1800E-01	.7611E-07	.1553E-08	.1004E-05	.1370E-08	.2231E-05
.1390E 02	.2220E-01	.1800E-01	.7070E-07	.1571E-08	.1160E-05	.1274E-08	.2413E-05
.1400E 02	.2400E-01	.1500E-01	.6583E-07	.1580E-08	.1318E-05	.9875E-09	.2536E-05
.1410E 02	.2550E-01	.1500E-01	.6122E-07	.1561E-08	.1475E-05	.9183E-09	.2631E-05
.1420E 02	.2700E-01	.1500E-01	.5693E-07	.1537E-08	.1630E-05	.8540E-09	.2720E-05
.1430E 02	.2850E-01	.1500E-01	.5294E-07	.1509E-08	.1782E-05	.7942E-09	.2802E-05
.1440E 02	.3000E-01	.1500E-01	.4923E-07	.1477E-08	.1931E-05	.7385E-09	.2879E-05
.1450E 02	.3150E-01	.1200E-01	.4570E-07	.1442E-08	.2077E-05	.5495E-09	.2950E-05
.1460E 02	.3270E-01	.1200E-01	.4257E-07	.1392E-08	.2219E-05	.5109E-09	.3003E-05
.1470E 02	.3390E-01	.1200E-01	.3959E-07	.1342E-08	.2356E-05	.4750E-09	.3052E-05
.1480E 02	.3510E-01	.1200E-01	.3681E-07	.1292E-08	.2487E-05	.4417E-09	.3098E-05
.1490E 02	.3630E-01	.1200E-01	.3422E-07	.1242E-08	.2614E-05	.4107E-09	.3140E-05
.1500E 02	.3750E-01	.9401E-02	.3132E-07	.1193E-08	.2736E-05	.2992E-09	.3180E-05
.1510E 02	.3844E-01	.9400E-02	.2959E-07	.1137E-08	.2852E-05	.2781E-09	.3209E-05
.1520E 02	.3938E-01	.9400E-02	.2751E-07	.1083E-08	.2963E-05	.2586E-09	.3235E-05
.1530E 02	.4032E-01	.9400E-02	.2550E-07	.1031E-08	.3069E-05	.2404E-09	.3260E-05
.1540E 02	.4126E-01	.9400E-02	.2378E-07	.9811E-09	.3170E-05	.2235E-09	.3283E-05
.1550E 02	.4220E-01	.7601E-02	.2211E-07	.9329E-09	.3265E-05	.1680E-09	.3305E-05
.1560E 02	.4296E-01	.7600E-02	.2055E-07	.8829E-09	.3356E-05	.1562E-09	.3321E-05
.1570E 02	.4372E-01	.7600E-02	.1911E-07	.8353E-09	.3442E-05	.1452E-09	.3336E-05
.1580E 02	.4446E-01	.7600E-02	.1776E-07	.7900E-09	.3523E-05	.1350E-09	.3350E-05
.1590E 02	.4524E-01	.7600E-02	.1651E-07	.7469E-09	.3600E-05	.1255E-09	.3363E-05
.1600E 02	.4600E-01	.6001E-02	.1535E-07	.7060E-09	.3672E-05	.9210E-10	.3375E-05
.1610E 02	.4660E-01	.6000E-02	.1427E-07	.6649E-09	.3741E-05	.8560E-10	.3384E-05
.1620E 02	.4720E-01	.6000E-02	.1326E-07	.6260E-09	.3805E-05	.7957E-10	.3392E-05
.1630E 02	.4780E-01	.6000E-02	.1233E-07	.5893E-09	.3866E-05	.7397E-10	.3400E-05
.1640E 02	.4840E-01	.6000E-02	.1146E-07	.5546E-09	.3923E-05	.6875E-10	.3407E-05
.1650E 02	.4900E-01	.4001E-02	.1065E-07	.5219E-09	.3977E-05	.4262E-10	.3414E-05
.1660E 02	.4940E-01	.4000E-02	.9900E-08	.4891E-09	.4028E-05	.3960E-10	.3418E-05
.1670E 02	.4980E-01	.4000E-02	.9202E-08	.4583E-09	.4075E-05	.3681E-10	.3422E-05
.1680E 02	.5020E-01	.4000E-02	.8533E-08	.4294E-09	.4119E-05	.3421E-10	.3425E-05
.1690E 02	.5060E-01	.4000E-02	.7949E-08	.4022E-09	.4161E-05	.3180E-10	.3429E-05
.1700E 02	.5100E-01	.4000E-02	.7388E-08	.3768E-09	.4200E-05	.2955E-10	.3432E-05
.1710E 02	.5140E-01	.4000E-02	.6867E-08	.3529E-09	.4236E-05	.2747E-10	.3435E-05
.1720E 02	.5180E-01	.4000E-02	.6382E-08	.3306E-09	.4270E-05	.2553E-10	.3437E-05
.1730E 02	.5220E-01	.4000E-02	.5931E-08	.3096E-09	.4302E-05	.2372E-10	.3440E-05
.1740E 02	.5260E-01	.4000E-02	.5512E-08	.2899E-09	.4332E-05	.2205E-10	.3442E-05

NI-58(N,2N)NI-57  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1750E 02	.5300E-01	.3001E-02	.5123E-08	.2715E-09	.4360E-05	.1537E-10	.3444E-05
.1760E 02	.5330E-01	.3000E-02	.4761E-08	.2537E-09	.4387E-05	.1428E-10	.3446E-05
.1770E 02	.5360E-01	.3000E-02	.4424E-08	.2371E-09	.4411E-05	.1327E-10	.3447E-05
.1780E 02	.5390E-01	.3000E-02	.4111E-08	.2216E-09	.4434E-05	.1233E-10	.3446E-05
.1790E 02	.5420E-01	.3000E-02	.3821E-08	.2071E-09	.4456E-05	.1146E-10	.3449E-05
.1800E 02	.5450E-01	.3000E-02	.3550E-08	.1935E-09	.4476E-05	.1065E-10	.3450E-05
.1810E 02	.5480E-01	.3000E-02	.3299E-08	.1808E-09	.4494E-05	.9898E-11	.3452E-05
.1820E 02	.5510E-01	.3000E-02	.3066E-08	.1689E-09	.4512E-05	.9197E-11	.3452E-05
.1830E 02	.5540E-01	.3000E-02	.2849E-08	.1578E-09	.4528E-05	.8546E-11	.3453E-05
.1840E 02	.5570E-01	.3000E-02	.2647E-08	.1474E-09	.4543E-05	.7941E-11	.3454E-05
.1850E 02	.5600E-01	.1002E-02	.2460E-08	.1377E-09	.4558E-05	.7464E-11	.3455E-05
.1860E 02	.5610E-01	.1000E-02	.2286E-08	.1282E-09	.4571E-05	.7286E-11	.3455E-05
.1870E 02	.5620E-01	.1000E-02	.2124E-08	.1193E-09	.4583E-05	.7124E-11	.3455E-05
.1880E 02	.5630E-01	.1000E-02	.1973E-08	.1111E-09	.4595E-05	.6973E-11	.3456E-05
.1890E 02	.5640E-01	.1000E-02	.1833E-08	.1034E-09	.4605E-05	.6833E-11	.3456E-05
.1900E 02	.5650E-01	.9999E-03	.1703E-08	.9625E-10	.4615E-05	.6703E-11	.3456E-05
.1910E 02	.5660E-01	.1000E-02	.1583E-08	.8958E-10	.4625E-05	.6583E-11	.3456E-05
.1920E 02	.5670E-01	.1000E-02	.1471E-08	.8338E-10	.4633E-05	.6471E-11	.3456E-05
.1930E 02	.5680E-01	.1000E-02	.1366E-08	.7760E-10	.4641E-05	.6366E-11	.3456E-05
.1940E 02	.5690E-01	.1000E-02	.1269E-08	.7223E-10	.4649E-05	.6269E-11	.3457E-05
.1950E 02	.5700E-01	.9195E-06	.1179E-08	.6722E-10	.4656E-05	.6184E-11	.3457E-05
.1960E 02	.5700E-01	.0000E 00	.1096E-08	.6245E-10	.4662E-05	.0000E 00	.3457E-05
.1970E 02	.5700E-01	.0000E 00	.1018E-08	.5802E-10	.4668E-05	.0000E 00	.3457E-05
.1980E 02	.5700E-01	.0000E 00	.9457E-09	.5390E-10	.4674E-05	.0000E 00	.3457E-05
.1990E 02	.5700E-01	.0000E 00	.8786E-09	.5008E-10	.4679E-05	.0000E 00	.3457E-05

SPECTRUM AVERAGE CROSS SECTION = .4684E-05

NI-58 (N, P) CO-58  
U-235 FISSION SPECTRUM



NI-58(N,P)C2-58  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.4000E 00	.4000E-06	.9541E-05	.3497E-03	.1399E-09	.3064E-08	.3336E-08	.1410E-06
.5000E 00	.3000E-05	.4675E-04	.3023E-03	.1087E-09	.5447E-07	.1694E-07	.1086E-05
.6000E 00	.1400E-04	.2100E-03	.3670E-03	.5149E-08	.3184E-06	.7908E-07	.5175E-05
.7000E 00	.5800E-04	.1626E-02	.3651E-03	.2135E-07	.1495E-05	.3778E-06	.2168E-04
.8000E 00	.2013E-03	.2193E-02	.3647E-03	.7342E-07	.5975E-05	.7999E-06	.7463E-04
.9000E 00	.4165E-03	.4616E-02	.3554E-03	.1493E-06	.1681E-04	.1654E-05	.1533E-03
.1000E 01	.8693E-03	.5047E-02	.3501E-03	.3044E-06	.3984E-04	.1767E-05	.3139E-03
.1100E 01	.2372E-02	.2549E-01	.3483E-03	.8072E-06	.6797E-04	.8673E-05	.8376E-03
.1200E 01	.4345E-02	.1398E-01	.3254E-03	.1431E-05	.2072E-03	.4604E-05	.1496E-02
.1300E 01	.6343E-02	.3555E-01	.3177E-03	.2015E-05	.3744E-03	.1129E-04	.2143E-02
.1400E 01	.1109E-01	.6216E-01	.3055E-03	.3388E-05	.6394E-03	.1899E-04	.3633E-02
.1500E 01	.1309E-01	.1777E-01	.2930E-03	.3835E-05	.1005E-02	.5207E-05	.4217E-02
.1600E 01	.1556E-01	.2710E-01	.2805E-03	.4363E-05	.1415E-02	.7602E-05	.4928E-02
.1700E 01	.2337E-01	.9942E-01	.2679E-03	.6260E-05	.1937E-02	.2663E-04	.7084E-02
.1800E 01	.2630E-01	.2682E-01	.2554E-03	.6718E-05	.2591E-02	.6850E-05	.7833E-02
.1900E 01	.3471E-01	.9835E-01	.2432E-03	.8441E-05	.3345E-02	.2392E-04	.9944E-02
.2000E 01	.3805E-01	.3199E-01	.2312E-03	.6799E-05	.4210E-02	.7397E-05	.1072E-01
.2100E 01	.4516E-01	.7943E-01	.2196E-03	.9915E-05	.5143E-02	.1744E-04	.1233E-01
.2200E 01	.5390E-01	.9559E-01	.2083E-03	.1123E-04	.6200E-02	.1991E-04	.1420E-01
.2300E 01	.9927E-01	-.1459E 00	.1973E-03	.1959E-04	.7712E-02	-.2878E-04	.2333E-01
.2400E 01	.9569E-01	-.1259E 00	.1868E-03	.1601E-04	.9485E-02	-.2352E-04	.2673E-01
.2500E 01	.1087E 00	.3268E 00	.1767E-03	.1920E-04	.1120E-01	.5774E-04	.2496E-01
.2600E 01	.1069E 00	-.3599E-01	.1670E-03	.1784E-04	.1306E-01	-.6008E-05	.2459E-01
.2700E 01	.1365E 00	.4022E 00	.1577E-03	.2152E-04	.1499E-01	.6341E-04	.2945E-01
.2800E 01	.1536E 00	.1440E 00	.1488E-03	.2285E-04	.1723E-01	.2143E-04	.3203E-01
.2900E 01	.1726E 00	.4751E 00	.1403E-03	.2422E-04	.1942E-01	.6666E-04	.3473E-01
.3000E 01	.1939E 00	-.7246E 00	.1323E-03	.2564E-04	.2206E-01	-.9583E-04	.3755E-01
.3100E 01	.1709E 00	-.7502E 00	.1246E-03	.2129E-04	.2442E-01	-.9720E-04	.3461E-01
.3200E 01	.2167E 00	.4368E 00	.1173E-03	.2542E-04	.2682E-01	.5710E-04	.4034E-01
.3300E 01	.2267E 00	-.4231E 00	.1104E-03	.2502E-04	.2958E-01	-.4670E-04	.4152E-01
.3400E 01	.2379E 00	.4301E 00	.1036E-03	.2471E-04	.3201E-01	.4465E-04	.4278E-01
.3500E 01	.2779E 00	.3470E 00	.9702E-04	.2713E-04	.3457E-01	.3387E-04	.4678E-01
.3600E 01	.2832E 00	.8861E 00	.9175E-04	.2598E-04	.3726E-01	.8130E-04	.4734E-01
.3700E 01	.3091E 00	.1151E 01	.8619E-04	.2664E-04	.3988E-01	.9921E-04	.4965E-01
.3800E 01	.3351E 00	.2227E 01	.8095E-04	.2713E-04	.4249E-01	.1803E-03	.5186E-01
.3900E 01	.3462E 00	.2432E 01	.7599E-04	.2631E-04	.4521E-01	.1848E-03	.5276E-01
.4000E 01	.3539E 00	.6441E 00	.7132E-04	.2524E-04	.4779E-01	.4594E-04	.5320E-01
.4100E 01	.3584E 00	.2727E 00	.6691E-04	.2398E-04	.5020E-01	.1823E-04	.5345E-01
.4200E 01	.3832E 00	.1176E 01	.6276E-04	.2405E-04	.5251E-01	.7380E-04	.5505E-01
.4300E 01	.4094E 00	.9720E-01	.5884E-04	.2409E-04	.5496E-01	.5720E-05	.5660E-01
.4400E 01	.4140E 00	.2933E 00	.5516E-04	.2284E-04	.5729E-01	.1618E-04	.5687E-01
.4500E 01	.4125E 00	-.9772E-01	.5159E-04	.2132E-04	.5951E-01	-.5052E-05	.5677E-01
.4600E 01	.4072E 00	.0000E 00	.4643E-04	.1972E-04	.6156E-01	.0000E 00	.5651E-01
.4700E 01	.4072E 00	.0000E 00	.4537E-04	.1847E-04	.6346E-01	.0000E 00	.5651E-01
.4800E 01	.4072E 00	.0000E 00	.4249E-04	.1730E-04	.6525E-01	.0000E 00	.5651E-01
.4900E 01	.4520E 00	.5247E 00	.3978E-04	.1798E-04	.6701E-01	.2087E-04	.5837E-01
.5000E 01	.4655E 00	-.1106E 00	.3724E-04	.1733E-04	.6880E-01	-.4118E-05	.5888E-01
.5100E 01	.4546E 00	-.1080E 00	.3485E-04	.1584E-04	.7046E-01	-.3763E-05	.5849E-01
.5200E 01	.4558E 00	.4963E 00	.3261E-04	.1487E-04	.7202E-01	.1625E-04	.5857E-01
.5300E 01	.5014E 00	.1904E 00	.3051E-04	.1530E-04	.7354E-01	.5810E-05	.6001E-01

NI-58(N,P)Cf-253  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.5400E 01	.5162E 00	.2559E-01	.2654E-04	.1473E-04	.7505E-01	.7389E-06	.6044E-01
.5500E 01	.5227E 00	.3701E 00	.2605E-04	.1395E-04	.7648E-01	.1009E-04	.6062E-01
.5600E 01	.5619E 00	.4064E 00	.2496E-04	.1402E-04	.7787E-01	.1014E-04	.6164E-01
.5700E 01	.6021E 00	.3330E 00	.2333E-04	.1405E-04	.7928E-01	.7770E-05	.6261E-01
.5800E 01	.6160E 00	-.3982E 00	.2101E-04	.1344E-04	.8067E-01	-.8686E-05	.6291E-01
.5900E 01	.5936E 00	.1620E 00	.2035E-04	.1210E-04	.8193E-01	.3302E-05	.6244E-01
.6000E 01	.6100E 00	.3180E-01	.1905E-04	.1162E-04	.8312E-01	.6058E-06	.6277E-01
.6100E 01	.6132E 00	.3126E-01	.1760E-04	.1091E-04	.8424E-01	.5689E-06	.6282E-01
.6200E 01	.6164E 00	.3213E-01	.1603E-04	.1025E-04	.8530E-01	.5342E-06	.6263E-01
.6300E 01	.6190E 00	.1995E-01	.1553E-04	.9615E-05	.8629E-01	.3099E-06	.6292E-01
.6400E 01	.6210E 00	.2002E-01	.1451E-04	.9010E-05	.8723E-01	.2904E-06	.6295E-01
.6500E 01	.6230E 00	.2734E-01	.1355E-04	.8441E-05	.8810E-01	.3773E-06	.6298E-01
.6600E 01	.6258E 00	.2797E-01	.1265E-04	.7918E-05	.8891E-01	.3539E-06	.6302E-01
.6700E 01	.6266E 00	.2809E-01	.1151E-04	.7426E-05	.8968E-01	.3319E-06	.6305E-01
.6800E 01	.6314E 00	.2791E-01	.1103E-04	.6963E-05	.9040E-01	.3078E-06	.6308E-01
.6900E 01	.6342E 00	.2803E-01	.1029E-04	.6529E-05	.9107E-01	.2866E-06	.6311E-01
.7000E 01	.6370E 00	.2369E-01	.9609E-05	.6121E-05	.9171E-01	.2295E-06	.6314E-01
.7100E 01	.6394E 00	.2398E-01	.8968E-05	.5734E-05	.9230E-01	.2150E-06	.6316E-01
.7200E 01	.6418E 00	.2497E-01	.8369E-05	.5371E-05	.9285E-01	.2014E-06	.6318E-01
.7300E 01	.6442E 00	.2593E-01	.7809E-05	.5030E-05	.9337E-01	.1869E-06	.6320E-01
.7400E 01	.6466E 00	.2402E-01	.7260E-05	.4711E-05	.9386E-01	.1750E-06	.6322E-01
.7500E 01	.6490E 00	.1197E-01	.6797E-05	.4411E-05	.9432E-01	.8138E-07	.6324E-01
.7600E 01	.6502E 00	.1199E-01	.6341E-05	.4123E-05	.9474E-01	.7605E-07	.6325E-01
.7700E 01	.6514E 00	.1202E-01	.5914E-05	.3853E-05	.9514E-01	.7107E-07	.6325E-01
.7800E 01	.6530E 00	.1995E-01	.5516E-05	.3602E-05	.9551E-01	.1101E-06	.6326E-01
.7900E 01	.6550E 00	.2002E-01	.5144E-05	.3370E-05	.9586E-01	.1030E-06	.6327E-01
.8000E 01	.6570E 00	.7969E-02	.4797E-05	.3152E-05	.9619E-01	.3832E-07	.6328E-01
.8100E 01	.6578E 00	.7998E-02	.4473E-05	.2942E-05	.9649E-01	.3578E-07	.6329E-01
.8200E 01	.6586E 00	.8007E-02	.4171E-05	.2747E-05	.9678E-01	.3340E-07	.6329E-01
.8300E 01	.6592E 00	.3998E-02	.3888E-05	.2563E-05	.9704E-01	.1555E-07	.6329E-01
.8400E 01	.6596E 00	.4001E-02	.3625E-05	.2391E-05	.9729E-01	.1450E-07	.6329E-01
.8500E 01	.6600E 00	.3997E-02	.3379E-05	.2230E-05	.9752E-01	.1351E-07	.6329E-01
.8600E 01	.6604E 00	.3999E-02	.3150E-05	.2080E-05	.9774E-01	.1260E-07	.6330E-01
.8700E 01	.6608E 00	.4002E-02	.2936E-05	.1940E-05	.9794E-01	.1175E-07	.6330E-01
.8800E 01	.6612E 00	.3998E-02	.2736E-05	.1809E-05	.9812E-01	.1094E-07	.6330E-01
.8900E 01	.6616E 00	.4001E-02	.2550E-05	.1687E-05	.9830E-01	.1020E-07	.6330E-01
.9000E 01	.6620E 00	-.4002E-02	.2376E-05	.1573E-05	.9846E-01	-.9509E-08	.6330E-01
.9100E 01	.6616E 00	-.4001E-02	.2214E-05	.1465E-05	.9861E-01	-.8858E-08	.6330E-01
.9200E 01	.6612E 00	-.3998E-02	.2063E-05	.1364E-05	.9875E-01	-.8249E-08	.6330E-01
.9300E 01	.6606E 00	-.8007E-02	.1922E-05	.1270E-05	.9889E-01	-.1539E-07	.6330E-01
.9400E 01	.6598E 00	-.7998E-02	.1791E-05	.1182E-05	.9901E-01	-.1432E-07	.6330E-01
.9500E 01	.6590E 00	-.1605E-01	.1660E-05	.1099E-05	.9912E-01	-.2677E-07	.6329E-01
.9600E 01	.6574E 00	-.1601E-01	.1554E-05	.1022E-05	.9923E-01	-.2488E-07	.6329E-01
.9700E 01	.6558E 00	-.1597E-01	.1448E-05	.9494E-06	.9933E-01	-.2312E-07	.6329E-01
.9800E 01	.6540E 00	-.2005E-01	.1346E-05	.8819E-06	.9942E-01	-.2703E-07	.6329E-01
.9900E 01	.6520E 00	-.1998E-01	.1256E-05	.8189E-06	.9950E-01	-.2510E-07	.6328E-01
.1000E 02	.6500E 00	-.8015E-02	.1170E-05	.7603E-06	.9958E-01	-.9375E-08	.6328E-01
.1010E 02	.6492E 00	-.8002E-02	.1069E-05	.7072E-06	.9966E-01	-.8718E-08	.6328E-01
.1020E 02	.6484E 00	-.7993E-02	.1014E-05	.6578E-06	.9972E-01	-.8108E-08	.6328E-01
.1030E 02	.6462E 00	-.3615E-01	.9447E-06	.6105E-06	.9979E-01	-.3415E-07	.6328E-01

NI-58(N,P)CU-58  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1040E 02	.6426E 00	-.3595E-01	.6797E-06	.5653E-06	.7985E-01	-.3162E-07	.6328E-01
.1050E 02	.6390E 00	-.3626E-01	.6191E-06	.5234E-06	.9990E-01	-.2970E-07	.6327E-01
.1060E 02	.6354E 00	-.3605E-01	.7627E-06	.4846E-06	.9995E-01	-.2749E-07	.6327E-01
.1070E 02	.6318E 00	-.3585E-01	.7101E-06	.4486E-06	.1000E 00	-.2545E-07	.6327E-01
.1080E 02	.6282E 00	-.3615E-01	.6611E-06	.4153E-06	.1000E 00	-.2390E-07	.6326E-01
.1090E 02	.6246E 00	-.3595E-01	.6154E-06	.3844E-06	.1001E 00	-.2212E-07	.6326E-01
.1100E 02	.6210E 00	-.5254E-01	.5729E-06	.3558E-06	.1001E 00	-.3010E-07	.6326E-01
.1110E 02	.6178E 00	-.5211E-01	.5333E-06	.3284E-06	.1002E 00	-.2779E-07	.6326E-01
.1120E 02	.6106E 00	-.5157E-01	.4965E-06	.3031E-06	.1002E 00	-.2565E-07	.6325E-01
.1130E 02	.6050E 00	-.6045E-01	.4621E-06	.2796E-06	.1002E 00	-.2793E-07	.6325E-01
.1140E 02	.5990E 00	-.5985E-01	.4301E-06	.2576E-06	.1002E 00	-.2574E-07	.6325E-01
.1150E 02	.5930E 00	-.6399E-01	.4003E-06	.2374E-06	.1003E 00	-.2762E-07	.6325E-01
.1160E 02	.5861E 00	-.6819E-01	.3726E-06	.2184E-06	.1003E 00	-.2541E-07	.6324E-01
.1170E 02	.5794E 00	-.6740E-01	.3468E-06	.2009E-06	.1003E 00	-.2337E-07	.6324E-01
.1180E 02	.5724E 00	-.7268E-01	.3227E-06	.1847E-06	.1003E 00	-.2345E-07	.6324E-01
.1190E 02	.5651E 00	-.7176E-01	.3003E-06	.1697E-06	.1003E 00	-.2155E-07	.6324E-01
.1200E 02	.5580E 00	-.8146E-01	.2795E-06	.1559E-06	.1004E 00	-.2276E-07	.6323E-01
.1210E 02	.5499E 00	-.8028E-01	.2600E-06	.1430E-06	.1004E 00	-.2088E-07	.6323E-01
.1220E 02	.5419E 00	-.7912E-01	.2420E-06	.1311E-06	.1004E 00	-.1914E-07	.6323E-01
.1230E 02	.5339E 00	-.8090E-01	.2231E-06	.1202E-06	.1004E 00	-.1822E-07	.6323E-01
.1240E 02	.5259E 00	-.7969E-01	.2095E-06	.1102E-06	.1004E 00	-.1669E-07	.6323E-01
.1250E 02	.5180E 00	-.8158E-01	.1949E-06	.1010E-06	.1004E 00	-.1590E-07	.6323E-01
.1260E 02	.5099E 00	-.8030E-01	.1813E-06	.9247E-07	.1004E 00	-.1456E-07	.6322E-01
.1270E 02	.5019E 00	-.7905E-01	.1687E-06	.8468E-07	.1004E 00	-.1334E-07	.6322E-01
.1280E 02	.4933E 00	-.9330E-01	.1570E-06	.7743E-07	.1005E 00	-.1464E-07	.6322E-01
.1290E 02	.4841E 00	-.9155E-01	.1460E-06	.7068E-07	.1005E 00	-.1337E-07	.6322E-01
.1300E 02	.4750E 00	-.1027E 00	.1358E-06	.6452E-07	.1005E 00	-.1395E-07	.6322E-01
.1310E 02	.4648E 00	-.1005E 00	.1264E-06	.5874E-07	.1005E 00	-.1270E-07	.6322E-01
.1320E 02	.4549E 00	-.9837E-01	.1175E-06	.5347E-07	.1005E 00	-.1156E-07	.6322E-01
.1330E 02	.4449E 00	-.1017E 00	.1093E-06	.4864E-07	.1005E 00	-.1112E-07	.6321E-01
.1340E 02	.4348E 00	-.9941E-01	.1017E-06	.4422E-07	.1005E 00	-.1011E-07	.6321E-01
.1350E 02	.4250E 00	-.8194E-01	.9459E-07	.4020E-07	.1005E 00	-.7751E-08	.6321E-01
.1360E 02	.4169E 00	-.8637E-01	.6798E-07	.3668E-07	.1005E 00	-.7071E-08	.6321E-01
.1370E 02	.4089E 00	-.7384E-01	.6183E-07	.3346E-07	.1005E 00	-.6451E-08	.6321E-01
.1380E 02	.4003E 00	-.9360E-01	.7611E-07	.3047E-07	.1005E 00	-.7124E-08	.6321E-01
.1390E 02	.3910E 00	-.9144E-01	.7073E-07	.2768E-07	.1005E 00	-.6472E-08	.6321E-01
.1400E 02	.3820E 00	-.6956E-01	.6583E-07	.2515E-07	.1005E 00	-.4579E-08	.6321E-01
.1410E 02	.3721E 00	-.6830E-01	.6122E-07	.2296E-07	.1005E 00	-.4181E-08	.6321E-01
.1420E 02	.3683E 00	-.6707E-01	.5693E-07	.2097E-07	.1005E 00	-.3819E-08	.6321E-01
.1430E 02	.3613E 00	-.7309E-01	.5294E-07	.1913E-07	.1005E 00	-.3870E-08	.6321E-01
.1440E 02	.3541E 00	-.7162E-01	.4923E-07	.1743E-07	.1005E 00	-.3526E-08	.6321E-01
.1450E 02	.3470E 00	-.6133E-01	.4575E-07	.1589E-07	.1005E 00	-.2808E-08	.6321E-01
.1460E 02	.3409E 00	-.6026E-01	.4257E-07	.1451E-07	.1005E 00	-.2565E-08	.6321E-01
.1470E 02	.3349E 00	-.5920E-01	.3959E-07	.1326E-07	.1005E 00	-.2343E-08	.6321E-01
.1480E 02	.3287E 00	-.6494E-01	.3681E-07	.1210E-07	.1005E 00	-.2390E-08	.6321E-01
.1490E 02	.3223E 00	-.6367E-01	.3422E-07	.1103E-07	.1005E 00	-.2179E-08	.6321E-01
.1500E 02	.3160E 00	-.5728E-01	.3162E-07	.1006E-07	.1005E 00	-.1823E-08	.6321E-01
.1510E 02	.3103E 00	-.5624E-01	.2959E-07	.9182E-08	.1005E 00	-.1664E-08	.6321E-01
.1520E 02	.3047E 00	-.5523E-01	.2751E-07	.8383E-08	.1005E 00	-.1519E-08	.6321E-01
.1530E 02	.2991E 00	-.5679E-01	.2558E-07	.7651E-08	.1005E 00	-.1452E-08	.6321E-01

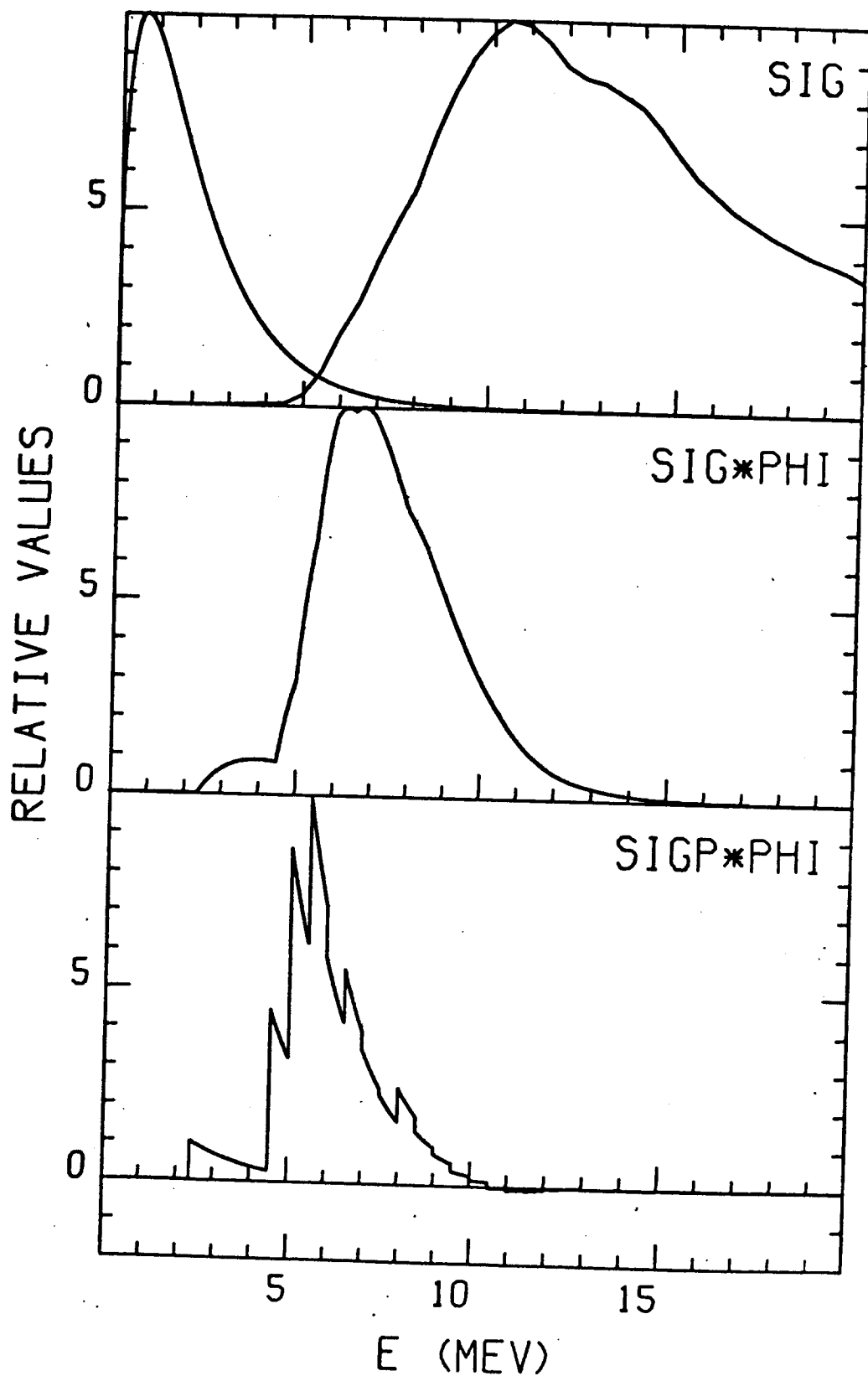


NI-58(N,P)CZ-58  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1540E 02	.2935E 00	-.5572E-01	.2373E-07	.6979E-08	.1005E 00	-.1325E-08	.6321E-01
.1550E 02	.2680E 00	-.4903E-01	.2211E-07	.6366E-08	.1005E 00	-.1084E-08	.6321E-01
.1560E 02	.2331E 00	-.4520E-01	.2055E-07	.5819E-08	.1005E 00	-.9905E-09	.6321E-01
.1570E 02	.2784E 00	-.4738E-01	.1911E-07	.5318E-08	.1005E 00	-.9053E-09	.6320E-01
.1580E 02	.2736E 00	-.4364E-01	.1778E-07	.4859E-08	.1005E 00	-.8638E-09	.6320E-01
.1590E 02	.2667E 00	-.4778E-01	.1651E-07	.4437E-08	.1005E 00	-.7889E-09	.6320E-01
.1600E 02	.2640E 00	-.4494E-01	.1535E-07	.4052E-08	.1005E 00	-.6898E-09	.6320E-01
.1610E 02	.2595E 00	-.4416E-01	.1427E-07	.3703E-08	.1005E 00	-.6303E-09	.6320E-01
.1620E 02	.2552E 00	-.4343E-01	.1326E-07	.3384E-08	.1005E 00	-.5760E-09	.6320E-01
.1630E 02	.2510E 00	-.4048E-01	.1233E-07	.3094E-08	.1005E 00	-.4990E-09	.6320E-01
.1640E 02	.2470E 00	-.3983E-01	.1146E-07	.2830E-08	.1005E 00	-.4564E-09	.6320E-01
.1650E 02	.2430E 00	-.3668E-01	.1065E-07	.2588E-08	.1005E 00	-.3907E-09	.6320E-01
.1660E 02	.2394E 00	-.3613E-01	.9900E-08	.2370E-08	.1005E 00	-.3577E-09	.6320E-01
.1670E 02	.2358E 00	-.3559E-01	.9202E-08	.2170E-08	.1005E 00	-.3275E-09	.6320E-01
.1680E 02	.2326E 00	-.2825E-01	.8553E-08	.1989E-08	.1005E 00	-.2416E-09	.6320E-01
.1690E 02	.2298E 00	-.2791E-01	.7949E-08	.1827E-08	.1005E 00	-.2219E-09	.6320E-01
.1700E 02	.2270E 00	-.3650E-01	.7388E-08	.1677E-08	.1005E 00	-.2254E-09	.6320E-01
.1710E 02	.2240E 00	-.3010E-01	.6867E-08	.1538E-08	.1005E 00	-.2067E-09	.6320E-01
.1720E 02	.2210E 00	-.2970E-01	.6382E-08	.1410E-08	.1005E 00	-.1895E-09	.6320E-01
.1730E 02	.2181E 00	-.2827E-01	.5931E-08	.1293E-08	.1005E 00	-.1677E-09	.6320E-01
.1740E 02	.2153E 00	-.2791E-01	.5512E-08	.1187E-08	.1005E 00	-.1538E-09	.6320E-01
.1750E 02	.2125E 00	-.2229E-01	.5123E-08	.1089E-08	.1005E 00	-.1142E-09	.6320E-01
.1760E 02	.2103E 00	-.2206E-01	.4761E-08	.1001E-08	.1005E 00	-.1050E-09	.6320E-01
.1770E 02	.2081E 00	-.2183E-01	.4424E-08	.9206E-09	.1005E 00	-.9656E-10	.6320E-01
.1780E 02	.2061E 00	-.1852E-01	.4111E-08	.8472E-09	.1005E 00	-.7616E-10	.6320E-01
.1790E 02	.2042E 00	-.1836E-01	.3821E-08	.7803E-09	.1005E 00	-.7014E-10	.6320E-01
.1800E 02	.2024E 00	-.1861E-01	.3550E-08	.7186E-09	.1005E 00	-.6608E-10	.6320E-01
.1810E 02	.2005E 00	-.1844E-01	.3299E-08	.6616E-09	.1005E 00	-.6084E-10	.6320E-01
.1820E 02	.1987E 00	-.1827E-01	.3066E-08	.6092E-09	.1005E 00	-.5602E-10	.6320E-01
.1830E 02	.1972E 00	-.1125E-01	.2849E-08	.5619E-09	.1005E 00	-.3204E-10	.6320E-01
.1840E 02	.1961E 00	-.1118E-01	.2647E-08	.5191E-09	.1005E 00	-.2960E-10	.6320E-01
.1850E 02	.1950E 00	-.1007E-01	.2460E-08	.4796E-09	.1005E 00	-.2476E-10	.6320E-01
.1860E 02	.1940E 00	-.1001E-01	.2286E-08	.4434E-09	.1005E 00	-.2288E-10	.6320E-01
.1870E 02	.1930E 00	-.9961E-02	.2124E-08	.4099E-09	.1005E 00	-.2115E-10	.6320E-01
.1880E 02	.1922E 00	-.6014E-02	.1973E-08	.3792E-09	.1005E 00	-.1187E-10	.6320E-01
.1890E 02	.1916E 00	-.5995E-02	.1833E-08	.3513E-09	.1005E 00	-.1099E-10	.6320E-01
.1900E 02	.1910E 00	-.4012E-02	.1703E-08	.3254E-09	.1005E 00	-.6834E-11	.6320E-01
.1910E 02	.1906E 00	-.4002E-02	.1583E-08	.3017E-09	.1005E 00	-.6334E-11	.6320E-01
.1920E 02	.1902E 00	-.3994E-02	.1471E-08	.2797E-09	.1005E 00	-.5873E-11	.6320E-01
.1930E 02	.1898E 00	-.4006E-02	.1366E-08	.2593E-09	.1005E 00	-.5474E-11	.6320E-01
.1940E 02	.1894E 00	-.3996E-02	.1269E-08	.2404E-09	.1005E 00	-.5075E-11	.6320E-01
.1950E 02	.1890E 00	-.3220E-05	.1179E-08	.2229E-09	.1005E 00	-.3797E-14	.6320E-01
.1960E 02	.1890E 00	.0000E 00	.1096E-08	.2071E-09	.1005E 00	.0000E 00	.6320E-01
.1970E 02	.1890E 00	.0000E 00	.1018E-08	.1924E-09	.1005E 00	.0000E 00	.6320E-01
.1980E 02	.1890E 00	.0000E 00	.9457E-09	.1787E-09	.1005E 00	.0000E 00	.6320E-01
.1990E 02	.1890E 00	.0000E 00	.8786E-09	.1660E-09	.1005E 00	.0000E 00	.6320E-01

SPECTRUM AVERAGE CROSS SECTION = .1005E 00

NI-60 (N, P) CO-60  
U-235 FISSION SPECTRUM



NI-60(N,P)CZ-60  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.2400E 01	.7266E-05	.4727E-03	.1866E-03	.1357E-08	.1115E-07	.8830E-07	.1452E-05
.2500E 01	.5454E-04	.4727E-03	.1767E-03	.9635E-08	.5728E-06	.8352E-07	.1004E-04
.2600E 01	.1018E-03	.4727E-03	.1670E-03	.1700E-07	.1916E-05	.7893E-07	.1816E-04
.2700E 01	.1491E-03	.4727E-03	.1577E-03	.2351E-07	.3951E-05	.7453E-07	.2583E-04
.2800E 01	.1964E-03	.4727E-03	.1488E-03	.2922E-07	.6596E-05	.7034E-07	.3307E-04
.2900E 01	.2436E-03	.4727E-03	.1403E-03	.3419E-07	.9775E-05	.6633E-07	.3990E-04
.3000E 01	.2909E-03	.4727E-03	.1323E-03	.3847E-07	.1342E-04	.6252E-07	.4634E-04
.3100E 01	.3382E-03	.4727E-03	.1246E-03	.4213E-07	.1745E-04	.5890E-07	.5240E-04
.3200E 01	.3855E-03	.4727E-03	.1173E-03	.4521E-07	.2183E-04	.5545E-07	.5612E-04
.3300E 01	.4327E-03	.4727E-03	.1104E-03	.4777E-07	.2648E-04	.5218E-07	.6350E-04
.3400E 01	.4800E-03	.4727E-03	.1038E-03	.4984E-07	.3137E-04	.4908E-07	.6656E-04
.3500E 01	.5273E-03	.4727E-03	.9762E-04	.5147E-07	.3643E-04	.4615E-07	.7331E-04
.3600E 01	.5745E-03	.4727E-03	.9175E-04	.5271E-07	.4165E-04	.4337E-07	.7779E-04
.3700E 01	.6216E-03	.4727E-03	.8619E-04	.5360E-07	.4697E-04	.4075E-07	.8199E-04
.3800E 01	.6691E-03	.4727E-03	.8095E-04	.5416E-07	.5236E-04	.3827E-07	.8594E-04
.3900E 01	.7164E-03	.4727E-03	.7599E-04	.5444E-07	.5779E-04	.3592E-07	.8965E-04
.4000E 01	.7636E-03	.4727E-03	.7132E-04	.5446E-07	.6324E-04	.3371E-07	.9313E-04
.4100E 01	.8109E-03	.4727E-03	.6691E-04	.5426E-07	.6867E-04	.3163E-07	.9639E-04
.4200E 01	.8582E-03	.4727E-03	.6276E-04	.5386E-07	.7408E-04	.2967E-07	.9945E-04
.4300E 01	.9055E-03	.4727E-03	.5864E-04	.5328E-07	.7944E-04	.2782E-07	.1023E-03
.4400E 01	.9527E-03	.4727E-03	.5516E-04	.5255E-07	.8473E-04	.2608E-07	.1050E-03
.4500E 01	.1000E-02	.7600E-02	.5169E-04	.5169E-07	.8994E-04	.3929E-06	.1079E-03
.4600E 01	.1760E-02	.7600E-02	.4843E-04	.8524E-07	.9685E-04	.3681E-06	.1459E-03
.4700E 01	.2520E-02	.7600E-02	.4537E-04	.1143E-06	.1069E-03	.3448E-06	.1816E-03
.4800E 01	.3280E-02	.7600E-02	.4249E-04	.1394E-06	.1196E-03	.3229E-06	.2149E-03
.4900E 01	.4040E-02	.7600E-02	.3978E-04	.1607E-06	.1346E-03	.3023E-06	.2462E-03
.5000E 01	.4800E-02	.2040E-01	.3724E-04	.1787E-06	.1517E-03	.2759E-06	.2759E-03
.5100E 01	.6840E-02	.2040E-01	.3485E-04	.2384E-06	.1726E-03	.27109E-06	.3494E-03
.5200E 01	.8380E-02	.2040E-01	.3261E-04	.2896E-06	.1991E-03	.2653E-06	.4181E-03
.5300E 01	.1092E-01	.2040E-01	.3051E-04	.3332E-06	.2303E-03	.26224E-06	.4825E-03
.5400E 01	.1296E-01	.2040E-01	.2854E-04	.3698E-06	.2655E-03	.25822E-06	.5426E-03
.5500E 01	.1500E-01	.3300E-01	.2669E-04	.4003E-06	.3041E-03	.28807E-06	.5993E-03
.5600E 01	.1830E-01	.3300E-01	.2496E-04	.4567E-06	.3471E-03	.28235E-06	.6844E-03
.5700E 01	.2160E-01	.3300E-01	.2333E-04	.5040E-06	.3952E-03	.27700E-06	.7640E-03
.5800E 01	.2490E-01	.3300E-01	.2181E-04	.5431E-06	.4476E-03	.27197E-06	.8385E-03
.5900E 01	.2820E-01	.3300E-01	.2038E-04	.5748E-06	.5036E-03	.26727E-06	.9081E-03
.6000E 01	.3150E-01	.2700E-01	.1905E-04	.6001E-06	.5624E-03	.25143E-06	.9730E-03
.6100E 01	.3420E-01	.2700E-01	.1780E-04	.6087E-06	.6229E-03	.24806E-06	.1023E-02
.6200E 01	.3690E-01	.2700E-01	.1663E-04	.6136E-06	.6841E-03	.24490E-06	.1069E-02
.6300E 01	.3960E-01	.2700E-01	.1553E-04	.6151E-06	.7455E-03	.24194E-06	.1113E-02
.6400E 01	.4230E-01	.2700E-01	.1451E-04	.6137E-06	.8070E-03	.23917E-06	.1153E-02
.6500E 01	.4500E-01	.3600E-01	.1355E-04	.6097E-06	.8662E-03	.24878E-06	.1191E-02
.6600E 01	.4860E-01	.3600E-01	.1265E-04	.6149E-06	.9294E-03	.24555E-06	.1238E-02
.6700E 01	.5220E-01	.3600E-01	.1181E-04	.6167E-06	.9910E-03	.24253E-06	.1282E-02
.6800E 01	.5580E-01	.3600E-01	.1103E-04	.6154E-06	.1053E-02	.23970E-06	.1323E-02
.6900E 01	.5940E-01	.3600E-01	.1029E-04	.6115E-06	.1114E-02	.23706E-06	.1362E-02
.7000E 01	.6300E-01	.3200E-01	.9639E-05	.6054E-06	.1175E-02	.23075E-06	.1397E-02
.7100E 01	.6620E-01	.3200E-01	.8960E-05	.5937E-06	.1235E-02	.22870E-06	.1427E-02
.7200E 01	.6940E-01	.3200E-01	.8369E-05	.5808E-06	.1294E-02	.22678E-06	.1455E-02
.7300E 01	.7260E-01	.3200E-01	.7809E-05	.5669E-06	.1351E-02	.22499E-06	.1481E-02

NI-60(N,P)C-60  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.7400E 01	.7580E-01	.3200E-01	.7236E-05	.5523E-06	.1407E-02	.2331E-06	.1505E-02
.7500E 01	.7900E-01	.3300E-01	.6797E-05	.5370E-06	.1461E-02	.2039E-06	.1527E-02
.7600E 01	.8200E-01	.3000E-01	.6341E-05	.5199E-06	.1514E-02	.1902E-06	.1547E-02
.7700E 01	.8500E-01	.3000E-01	.5914E-05	.5027E-06	.1565E-02	.1774E-06	.1565E-02
.7800E 01	.8800E-01	.3000E-01	.5516E-05	.4854E-06	.1615E-02	.1655E-06	.1582E-02
.7900E 01	.9100E-01	.3000E-01	.5144E-05	.4681E-06	.1662E-02	.1543E-06	.1598E-02
.8000E 01	.9400E-01	.4600E-01	.4797E-05	.4509E-06	.1708E-02	.2207E-06	.1613E-02
.8100E 01	.9600E-01	.4600E-01	.4473E-05	.4411E-06	.1753E-02	.2058E-06	.1635E-02
.8200E 01	.1032E 00	.4600E-01	.4171E-05	.4304E-06	.1797E-02	.1919E-06	.1655E-02
.8300E 01	.1078E 00	.4600E-01	.3888E-05	.4192E-06	.1839E-02	.1789E-06	.1673E-02
.8400E 01	.1124E 00	.4600E-01	.3625E-05	.4075E-06	.1880E-02	.1668E-06	.1690E-02
.8500E 01	.1170E 00	.3500E-01	.3379E-05	.3954E-06	.1920E-02	.1217E-06	.1706E-02
.8600E 01	.1206E 00	.3600E-01	.3150E-05	.3799E-06	.1959E-02	.1134E-06	.1718E-02
.8700E 01	.1242E 00	.3600E-01	.2936E-05	.3646E-06	.1996E-02	.1057E-06	.1729E-02
.8800E 01	.1278E 00	.3600E-01	.2736E-05	.3497E-06	.2032E-02	.9850E-07	.1739E-02
.8900E 01	.1314E 00	.3600E-01	.2550E-05	.3351E-06	.2066E-02	.9180E-07	.1749E-02
.9000E 01	.1350E 00	.3600E-01	.2376E-05	.3208E-06	.2099E-02	.7129E-07	.1758E-02
.9100E 01	.1380E 00	.3000E-01	.2214E-05	.3056E-06	.2130E-02	.6643E-07	.1765E-02
.9200E 01	.1410E 00	.3000E-01	.2063E-05	.2909E-06	.2160E-02	.6189E-07	.1771E-02
.9300E 01	.1440E 00	.3000E-01	.1922E-05	.2768E-06	.2189E-02	.5767E-07	.1777E-02
.9400E 01	.1470E 00	.3000E-01	.1791E-05	.2633E-06	.2216E-02	.5373E-07	.1783E-02
.9500E 01	.1500E 00	.2000E-01	.1668E-05	.2503E-06	.2241E-02	.3337E-07	.1788E-02
.9600E 01	.1520E 00	.2000E-01	.1554E-05	.2362E-06	.2266E-02	.3108E-07	.1791E-02
.9700E 01	.1540E 00	.2000E-01	.1448E-05	.2229E-06	.2289E-02	.2895E-07	.1794E-02
.9800E 01	.1560E 00	.2000E-01	.1340E-05	.2104E-06	.2310E-02	.2697E-07	.1797E-02
.9900E 01	.1580E 00	.2000E-01	.1256E-05	.1984E-06	.2331E-02	.2512E-07	.1799E-02
.1000E 02	.1600E 00	.1200E-01	.1170E-05	.1872E-06	.2350E-02	.1404E-07	.1802E-02
.1010E 02	.1612E 00	.1200E-01	.1089E-05	.1756E-06	.2368E-02	.1307E-07	.1803E-02
.1020E 02	.1624E 00	.1200E-01	.1014E-05	.1648E-06	.2385E-02	.1217E-07	.1804E-02
.1030E 02	.1636E 00	.1200E-01	.9447E-06	.1546E-06	.2401E-02	.1134E-07	.1805E-02
.1040E 02	.1648E 00	.1200E-01	.8797E-06	.1450E-06	.2416E-02	.1056E-07	.1807E-02
.1050E 02	.1660E 00	-.3956E-02	.8191E-06	.1360E-06	.2430E-02	-.3273E-08	.1808E-02
.1060E 02	.1656E 00	-.4000E-02	.7627E-06	.1263E-06	.2443E-02	-.3051E-08	.1807E-02
.1070E 02	.1652E 00	-.4000E-02	.7101E-06	.1173E-06	.2455E-02	-.2840E-08	.1807E-02
.1080E 02	.1648E 00	-.4000E-02	.6611E-06	.1089E-06	.2467E-02	-.2644E-08	.1807E-02
.1090E 02	.1644E 00	-.4000E-02	.6154E-06	.1012E-06	.2477E-02	-.2462E-08	.1806E-02
.1100E 02	.1640E 00	-.1400E-01	.5729E-06	.9396E-07	.2487E-02	-.2019E-08	.1806E-02
.1110E 02	.1626E 00	-.1400E-01	.5333E-06	.8672E-07	.2496E-02	-.7467E-09	.1805E-02
.1120E 02	.1612E 00	-.1400E-01	.4965E-06	.8003E-07	.2504E-02	-.6950E-08	.1805E-02
.1130E 02	.1598E 00	-.1400E-01	.4621E-06	.7384E-07	.2512E-02	-.6469E-08	.1804E-02
.1140E 02	.1584E 00	-.1400E-01	.4301E-06	.6813E-07	.2519E-02	-.6022E-08	.1803E-02
.1150E 02	.1570E 00	-.2000E-01	.4003E-06	.6285E-07	.2525E-02	-.8006E-08	.1803E-02
.1160E 02	.1550E 00	-.2000E-01	.3726E-06	.5775E-07	.2532E-02	-.7452E-08	.1802E-02
.1170E 02	.1530E 00	-.2000E-01	.3468E-06	.5305E-07	.2537E-02	-.6935E-08	.1801E-02
.1180E 02	.1510E 00	-.2000E-01	.3227E-06	.4873E-07	.2542E-02	-.6454E-08	.1801E-02
.1190E 02	.1490E 00	-.2000E-01	.3003E-06	.4475E-07	.2547E-02	-.6006E-08	.1800E-02
.1200E 02	.1470E 00	-.1000E-01	.2795E-06	.4108E-07	.2551E-02	-.2796E-08	.1799E-02
.1210E 02	.1460E 00	-.1000E-01	.2600E-06	.3797E-07	.2555E-02	-.2600E-08	.1799E-02
.1220E 02	.1450E 00	-.1000E-01	.2420E-06	.3509E-07	.2559E-02	-.2420E-08	.1799E-02
.1230E 02	.1440E 00	-.1000E-01	.2251E-06	.3242E-07	.2562E-02	-.2251E-08	.1799E-02

NI-60(N,P)CC-60  
U-235 FISSION SPECTRUM

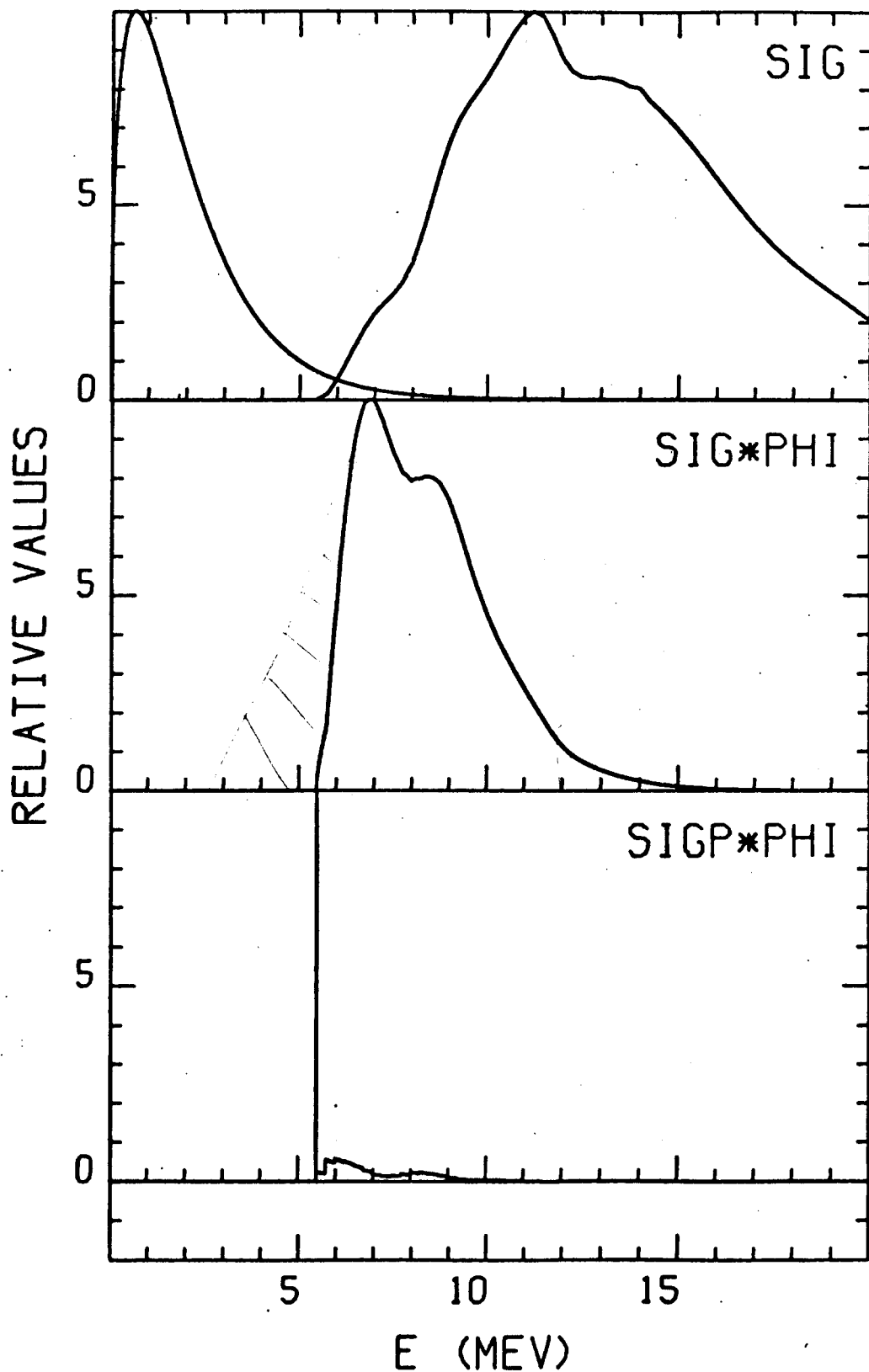
E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.1240E 02	.1430E 00	-.1000E-01	.2095E-06	.2996E-07	.2565E-02	-.2095E-06	.1799E-02
.1250E 02	.1420E 00	-.4002E-02	.1949E-06	.2768E-07	.2568E-02	-.7601E-09	.1798E-02
.1260E 02	.1416E 00	-.4000E-02	.1813E-06	.2568E-07	.2571E-02	-.7254E-09	.1798E-02
.1270E 02	.1412E 00	-.4000E-02	.1667E-06	.2382E-07	.2573E-02	-.6749E-09	.1798E-02
.1280E 02	.1408E 00	-.4000E-02	.1570E-06	.2210E-07	.2575E-02	-.6278E-09	.1798E-02
.1290E 02	.1404E 00	-.4000E-02	.1460E-06	.2050E-07	.2578E-02	-.5841E-09	.1798E-02
.1300E 02	.1400E 00	-.9997E-02	.1358E-06	.1902E-07	.2580E-02	-.1358E-08	.1798E-02
.1310E 02	.1390E 00	-.1000E-01	.1264E-06	.1756E-07	.2581E-02	-.1264E-08	.1798E-02
.1320E 02	.1380E 00	-.1000E-01	.1175E-06	.1622E-07	.2583E-02	-.1175E-08	.1798E-02
.1330E 02	.1370E 00	-.1000E-01	.1093E-06	.1498E-07	.2585E-02	-.1093E-08	.1798E-02
.1340E 02	.1360E 00	-.1000E-01	.1017E-06	.1383E-07	.2586E-02	-.1017E-08	.1798E-02
.1350E 02	.1350E 00	-.1000E-01	.9459E-07	.1277E-07	.2587E-02	-.9459E-09	.1797E-02
.1360E 02	.1340E 00	-.1000E-01	.8798E-07	.1179E-07	.2589E-02	-.8798E-09	.1797E-02
.1370E 02	.1330E 00	-.1000E-01	.8183E-07	.1088E-07	.2590E-02	-.8183E-09	.1797E-02
.1380E 02	.1320E 00	-.1000E-01	.7611E-07	.1005E-07	.2591E-02	-.7611E-09	.1797E-02
.1390E 02	.1310E 00	-.1000E-01	.7078E-07	.9273E-08	.2592E-02	-.7078E-09	.1797E-02
.1400E 02	.1300E 00	-.1800E-01	.6533E-07	.8558E-08	.2593E-02	-.1165E-08	.1797E-02
.1410E 02	.1282E 00	-.1800E-01	.6122E-07	.7849E-08	.2594E-02	-.1102E-08	.1797E-02
.1420E 02	.1264E 00	-.1800E-01	.5693E-07	.7196E-08	.2594E-02	-.1025E-08	.1797E-02
.1430E 02	.1246E 00	-.1800E-01	.5294E-07	.6597E-08	.2595E-02	-.9530E-09	.1797E-02
.1440E 02	.1228E 00	-.1800E-01	.4923E-07	.6046E-08	.2596E-02	-.8862E-09	.1797E-02
.1450E 02	.1210E 00	-.2200E-01	.4578E-07	.5540E-08	.2596E-02	-.1007E-08	.1797E-02
.1460E 02	.1188E 00	-.2200E-01	.4257E-07	.5058E-08	.2597E-02	-.9366E-09	.1796E-02
.1470E 02	.1166E 00	-.2200E-01	.3959E-07	.4616E-08	.2597E-02	-.8709E-09	.1796E-02
.1480E 02	.1144E 00	-.2200E-01	.3631E-07	.4211E-08	.2598E-02	-.8098E-09	.1796E-02
.1490E 02	.1122E 00	-.2200E-01	.3422E-07	.3840E-08	.2598E-02	-.7529E-09	.1796E-02
.1500E 02	.1100E 00	-.2000E-01	.3182E-07	.3500E-08	.2598E-02	-.6365E-09	.1796E-02
.1510E 02	.1080E 00	-.2000E-01	.2959E-07	.3195E-08	.2599E-02	-.5917E-09	.1796E-02
.1520E 02	.1060E 00	-.2000E-01	.2751E-07	.2916E-08	.2599E-02	-.5502E-09	.1796E-02
.1530E 02	.1040E 00	-.2000E-01	.2558E-07	.2660E-08	.2599E-02	-.5115E-09	.1796E-02
.1540E 02	.1020E 00	-.2000E-01	.2376E-07	.2425E-08	.2600E-02	-.4756E-09	.1796E-02
.1550E 02	.1000E 00	-.1400E-01	.2211E-07	.2211E-08	.2600E-02	-.3096E-09	.1796E-02
.1560E 02	.9860E-01	-.1400E-01	.2055E-07	.2026E-08	.2600E-02	-.2677E-09	.1796E-02
.1570E 02	.9720E-01	-.1400E-01	.1911E-07	.1857E-08	.2600E-02	-.2675E-09	.1796E-02
.1580E 02	.9580E-01	-.1400E-01	.1776E-07	.1701E-08	.2600E-02	-.2487E-09	.1796E-02
.1590E 02	.9440E-01	-.1400E-01	.1651E-07	.1559E-08	.2601E-02	-.2311E-09	.1796E-02
.1600E 02	.9300E-01	-.1400E-01	.1535E-07	.1427E-08	.2601E-02	-.2149E-09	.1796E-02
.1610E 02	.9160E-01	-.1400E-01	.1427E-07	.1307E-08	.2601E-02	-.1997E-09	.1796E-02
.1620E 02	.9020E-01	-.1400E-01	.1326E-07	.1196E-08	.2601E-02	-.1857E-09	.1796E-02
.1630E 02	.8880E-01	-.1400E-01	.1233E-07	.1095E-08	.2601E-02	-.1726E-09	.1796E-02
.1640E 02	.8740E-01	-.1400E-01	.1146E-07	.1002E-08	.2601E-02	-.1604E-09	.1796E-02
.1650E 02	.8600E-01	-.1000E-01	.1065E-07	.9160E-09	.2601E-02	-.1065E-09	.1796E-02
.1660E 02	.8500E-01	-.1000E-01	.9900E-08	.8415E-09	.2601E-02	-.9900E-10	.1796E-02
.1670E 02	.8400E-01	-.1000E-01	.9202E-08	.7730E-09	.2601E-02	-.9202E-10	.1796E-02
.1680E 02	.8300E-01	-.1000E-01	.8533E-08	.7099E-09	.2602E-02	-.8553E-10	.1796E-02
.1690E 02	.8200E-01	-.1000E-01	.7949E-08	.6518E-09	.2602E-02	-.7949E-10	.1796E-02
.1700E 02	.8100E-01	-.1000E-01	.7388E-08	.5984E-09	.2602E-02	-.7388E-10	.1796E-02
.1710E 02	.8000E-01	-.1000E-01	.6867E-08	.5493E-09	.2602E-02	-.6867E-10	.1796E-02
.1720E 02	.7900E-01	-.1000E-01	.6382E-08	.5042E-09	.2602E-02	-.6382E-10	.1796E-02
.1730E 02	.7800E-01	-.1000E-01	.5931E-08	.4626E-09	.2602E-02	-.5931E-10	.1796E-02

NI-60(N,P)CE-60  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.1740E 02	.7700E-01	-.1000E-01	.5512E-08	.4244E-09	.2602E-02	-.5512E-10	.1796E-02
.1750E 02	.7600E-01	-.8901E-02	.5123E-08	.3893E-09	.2602E-02	-.4099E-10	.1796E-02
.1760E 02	.7520E-01	-.8000E-02	.4761E-08	.3580E-09	.2602E-02	-.3809E-10	.1796E-02
.1770E 02	.7440E-01	-.8000E-02	.4424E-08	.3292E-09	.2602E-02	-.3539E-10	.1796E-02
.1780E 02	.7360E-01	-.8000E-02	.4111E-08	.3026E-09	.2602E-02	-.3289E-10	.1796E-02
.1790E 02	.7280E-01	-.8000E-02	.3821E-08	.2781E-09	.2602E-02	-.3056E-10	.1796E-02
.1800E 02	.7200E-01	-.8000E-02	.3550E-08	.2556E-09	.2602E-02	-.2840E-10	.1796E-02
.1810E 02	.7120E-01	-.8000E-02	.3299E-08	.2349E-09	.2602E-02	-.2639E-10	.1796E-02
.1820E 02	.7040E-01	-.9000E-02	.3006E-08	.2158E-09	.2602E-02	-.2453E-10	.1796E-02
.1830E 02	.6960E-01	-.8000E-02	.2849E-08	.1983E-09	.2602E-02	-.2279E-10	.1796E-02
.1840E 02	.6880E-01	-.8000E-02	.2647E-08	.1821E-09	.2602E-02	-.2118E-10	.1796E-02
.1850E 02	.6800E-01	-.6002E-02	.2460E-08	.1673E-09	.2602E-02	-.1476E-10	.1796E-02
.1860E 02	.6740E-01	-.6000E-02	.2206E-08	.1540E-09	.2602E-02	-.1371E-10	.1796E-02
.1870E 02	.6680E-01	-.6000E-02	.2124E-08	.1419E-09	.2602E-02	-.1274E-10	.1796E-02
.1880E 02	.6620E-01	-.6000E-02	.1973E-08	.1306E-09	.2602E-02	-.1184E-10	.1796E-02
.1890E 02	.6560E-01	-.6000E-02	.1833E-08	.1203E-09	.2602E-02	-.1100E-10	.1796E-02
.1900E 02	.6500E-01	-.6000E-02	.1703E-08	.1107E-09	.2602E-02	-.1022E-10	.1796E-02
.1910E 02	.6440E-01	-.6000E-02	.1583E-08	.1019E-09	.2602E-02	-.9496E-11	.1796E-02
.1920E 02	.6380E-01	-.6000E-02	.1471E-08	.9382E-10	.2602E-02	-.8823E-11	.1796E-02
.1930E 02	.6320E-01	-.6000E-02	.1366E-08	.8635E-10	.2602E-02	-.8197E-11	.1795E-02
.1940E 02	.6260E-01	-.6000E-02	.1269E-08	.7946E-10	.2602E-02	-.7616E-11	.1795E-02
.1950E 02	.6200E-01	-.7998E-02	.1179E-08	.7312E-10	.2602E-02	-.9432E-11	.1795E-02
.1960E 02	.6120E-01	-.8000E-02	.1096E-08	.6705E-10	.2602E-02	-.8765E-11	.1795E-02
.1970E 02	.6040E-01	-.8000E-02	.1018E-08	.6148E-10	.2602E-02	-.8143E-11	.1795E-02
.1980E 02	.5960E-01	-.8000E-02	.9457E-09	.5636E-10	.2602E-02	-.7565E-11	.1795E-02
.1990E 02	.5880E-01	-.8000E-02	.8786E-09	.5166E-10	.2602E-02	-.7028E-11	.1795E-02

SPECTRUM AVERAGE CROSS SECTION = .2602E-02

CU-63 (N, ALPHA) CO-60  
U-235 FISSION SPECTRUM



CU-63(N,ALPHA)C3-63  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.5600E 01	.3395E-03	.2395E-02	.2496E-04	.8473E-08	.5667E-06	.5977E-07	.8913E-05
.5700E 01	.5790E-03	.2395E-02	.2333E-04	.1351E-07	.1674E-05	.5588E-07	.1469E-04
.5800E 01	.1031E-02	.6645E-02	.2161E-04	.2249E-07	.3370E-05	.1449E-06	.2490E-04
.5900E 01	.1696E-02	.6645E-02	.2036E-04	.3456E-07	.6243E-05	.1355E-06	.3891E-04
.6000E 01	.2360E-02	.8240E-02	.1905E-04	.4496E-07	.1024E-04	.1570E-06	.5203E-04
.6100E 01	.3194E-02	.8240E-02	.1780E-04	.5667E-07	.1534E-04	.1467E-06	.6720E-04
.6200E 01	.4008E-02	.8240E-02	.1663E-04	.6665E-07	.2153E-04	.1370E-06	.8133E-04
.6300E 01	.4851E-02	.8620E-02	.1553E-04	.7535E-07	.2863E-04	.1339E-06	.9493E-04
.6400E 01	.5713E-02	.8620E-02	.1451E-04	.8289E-07	.3656E-04	.1251E-06	.1077E-03
.6500E 01	.6575E-02	.8124E-02	.1355E-04	.8909E-07	.4517E-04	.1101E-06	.1199E-03
.6600E 01	.7387E-02	.8124E-02	.1265E-04	.9347E-07	.5431E-04	.1028E-06	.1306E-03
.6700E 01	.8200E-02	.8124E-02	.1181E-04	.9687E-07	.6384E-04	.9597E-07	.1405E-03
.6800E 01	.8944E-02	.6760E-02	.1103E-04	.9864E-07	.7364E-04	.7455E-07	.1490E-03
.6900E 01	.9620E-02	.6760E-02	.1029E-04	.9904E-07	.8353E-04	.6959E-07	.1562E-03
.7000E 01	.1030E-01	.4964E-02	.9609E-05	.9893E-07	.9343E-04	.4770E-07	.1629E-03
.7100E 01	.1079E-01	.4964E-02	.8968E-05	.9678E-07	.1032E-03	.4452E-07	.1675E-03
.7200E 01	.1129E-01	.4964E-02	.8369E-05	.9447E-07	.1128E-03	.4154E-07	.1718E-03
.7300E 01	.1176E-01	.4496E-02	.7809E-05	.9185E-07	.1221E-03	.3511E-07	.1756E-03
.7400E 01	.1221E-01	.4496E-02	.7236E-05	.8897E-07	.1311E-03	.3276E-07	.1790E-03
.7500E 01	.1266E-01	.5796E-02	.6797E-05	.8606E-07	.1399E-03	.3939E-07	.1822E-03
.7600E 01	.1324E-01	.5796E-02	.6341E-05	.8395E-07	.1484E-03	.3675E-07	.1860E-03
.7700E 01	.1382E-01	.5796E-02	.5914E-05	.8174E-07	.1567E-03	.3428E-07	.1896E-03
.7800E 01	.1455E-01	.8864E-02	.5516E-05	.8028E-07	.1648E-03	.4689E-07	.1937E-03
.7900E 01	.1544E-01	.8864E-02	.5144E-05	.7943E-07	.1727E-03	.4560E-07	.1985E-03
.8000E 01	.1633E-01	.1304E-01	.4797E-05	.7832E-07	.1806E-03	.6254E-07	.2029E-03
.8100E 01	.1763E-01	.1304E-01	.4473E-05	.7886E-07	.1885E-03	.5831E-07	.2089E-03
.8200E 01	.1593E-01	.1304E-01	.4171E-05	.7897E-07	.1964E-03	.5437E-07	.2146E-03
.8300E 01	.2037E-01	.1562E-01	.3886E-05	.7919E-07	.2043E-03	.6074E-07	.2203E-03
.8400E 01	.2193E-01	.1562E-01	.3625E-05	.7949E-07	.2122E-03	.5662E-07	.2262E-03
.8500E 01	.2349E-01	.1596E-01	.3379E-05	.7938E-07	.2202E-03	.5393E-07	.2317E-03
.8600E 01	.2509E-01	.1596E-01	.3150E-05	.7902E-07	.2281E-03	.5027E-07	.2369E-03
.8700E 01	.2668E-01	.1596E-01	.2936E-05	.7833E-07	.2360E-03	.4686E-07	.2417E-03
.8800E 01	.2818E-01	.1405E-01	.2736E-05	.7711E-07	.2437E-03	.3844E-07	.2460E-03
.8900E 01	.2959E-01	.1405E-01	.2550E-05	.7545E-07	.2514E-03	.3582E-07	.2497E-03
.9000E 01	.3099E-01	.1050E-01	.2376E-05	.7364E-07	.2588E-03	.2494E-07	.2531E-03
.9100E 01	.3204E-01	.1050E-01	.2214E-05	.7095E-07	.2661E-03	.2324E-07	.2555E-03
.9200E 01	.3309E-01	.1050E-01	.2063E-05	.6827E-07	.2730E-03	.2165E-07	.2578E-03
.9300E 01	.3400E-01	.7748E-02	.1922E-05	.6536E-07	.2797E-03	.1489E-07	.2596E-03
.9400E 01	.3478E-01	.7748E-02	.1791E-05	.6228E-07	.2861E-03	.1388E-07	.2610E-03
.9500E 01	.3555E-01	.6408E-02	.1666E-05	.5931E-07	.2922E-03	.1069E-07	.2624E-03
.9600E 01	.3619E-01	.6408E-02	.1554E-05	.5625E-07	.2979E-03	.9959E-08	.2634E-03
.9700E 01	.3683E-01	.6408E-02	.1443E-05	.5332E-07	.3034E-03	.9277E-08	.2644E-03
.9800E 01	.3748E-01	.6484E-02	.1348E-05	.5054E-07	.3086E-03	.8743E-08	.2653E-03
.9900E 01	.3813E-01	.6484E-02	.1256E-05	.4789E-07	.3135E-03	.8144E-08	.2661E-03
.1000E 02	.3878E-01	.7564E-02	.1170E-05	.4536E-07	.3182E-03	.8847E-08	.2669E-03
.1010E 02	.3953E-01	.7564E-02	.1039E-05	.4307E-07	.3226E-03	.8240E-08	.2677E-03
.1020E 02	.4029E-01	.7564E-02	.1014E-05	.4087E-07	.3268E-03	.7674E-08	.2685E-03
.1030E 02	.4107E-01	.8056E-02	.9447E-06	.3880E-07	.3308E-03	.7611E-08	.2693E-03
.1040E 02	.4188E-01	.8056E-02	.8797E-06	.3684E-07	.3346E-03	.7087E-08	.2700E-03
.1050E 02	.4266E-01	.7544E-02	.8191E-06	.3496E-07	.3381E-03	.6179E-08	.2707E-03



CU-63(N,ALPHA)C2-60  
U-235 FISSION SPECTRUM

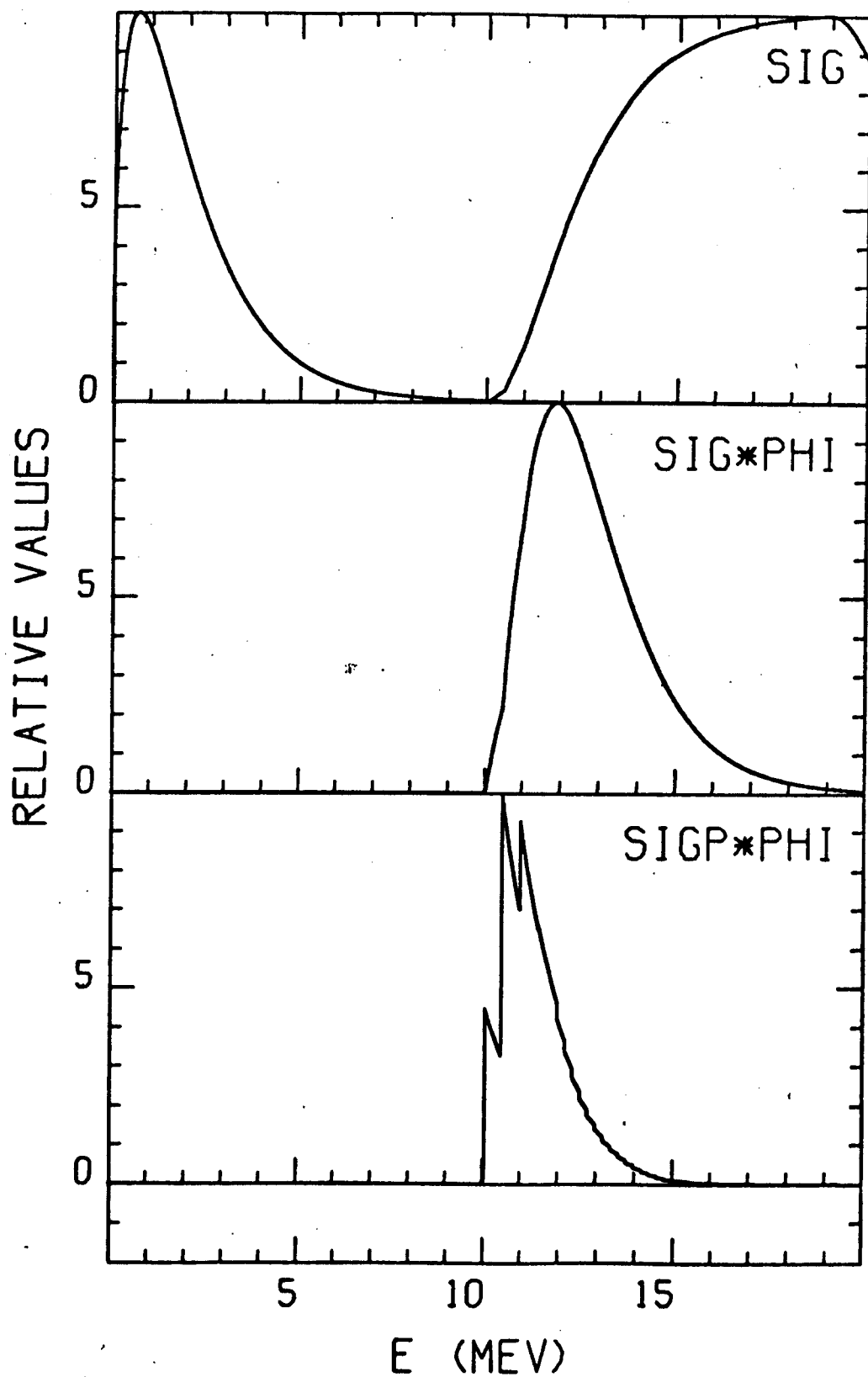
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.1070E 02	.4419E-01	.7544E-02	.7101E-06	.3138E-07	.3448E-03	.5357E-08	.2719E-03
.1080E 02	.4467E-01	.6040E-02	.6611E-06	.2966E-07	.3478E-03	.3993E-08	.2723E-03
.1090E 02	.4547E-01	.6040E-02	.6154E-06	.2799E-07	.3507E-03	.3717E-08	.2727E-03
.1100E 02	.4606E-01	.3201E-02	.5729E-06	.2640E-07	.3534E-03	.1834E-08	.2731E-03
.1110E 02	.4640E-01	.3200E-02	.5333E-06	.2474E-07	.3560E-03	.1707E-08	.2733E-03
.1120E 02	.4672E-01	.3200E-02	.4965E-06	.2319E-07	.3584E-03	.1589E-08	.2734E-03
.1130E 02	.4676E-01	.2300E-02	.4621E-06	.2161E-07	.3606E-03	.1063E-08	.2734E-03
.1140E 02	.4653E-01	.2300E-02	.4301E-06	.2001E-07	.3627E-03	.9893E-09	.2733E-03
.1150E 02	.4630E-01	.9142E-02	.4003E-06	.1854E-07	.3646E-03	.3660E-08	.2732E-03
.1160E 02	.4539E-01	.9144E-02	.3726E-06	.1691E-07	.3664E-03	.3407E-08	.2729E-03
.1170E 02	.4447E-01	.9144E-02	.3460E-06	.1542E-07	.3680E-03	.3171E-08	.2726E-03
.1180E 02	.4348E-01	.1066E-01	.3227E-06	.1403E-07	.3695E-03	.3439E-08	.2722E-03
.1190E 02	.4242E-01	.1066E-01	.3003E-06	.1274E-07	.3708E-03	.3200E-08	.2719E-03
.1200E 02	.4135E-01	.6625E-02	.2795E-06	.1156E-07	.3720E-03	.1852E-08	.2716E-03
.1210E 02	.4069E-01	.6624E-02	.2600E-06	.1058E-07	.3731E-03	.1723E-08	.2714E-03
.1220E 02	.4003E-01	.6624E-02	.2420E-06	.9685E-08	.3741E-03	.1603E-08	.2712E-03
.1230E 02	.3956E-01	.2764E-02	.2251E-06	.8906E-08	.3751E-03	.6223E-09	.2711E-03
.1240E 02	.3928E-01	.2764E-02	.2095E-06	.8229E-08	.3759E-03	.5790E-09	.2711E-03
.1250E 02	.3901E-01	.5168E-03	.1949E-06	.7603E-08	.3767E-03	.1007E-09	.2710E-03
.1260E 02	.3895E-01	.5160E-03	.1813E-06	.7064E-08	.3774E-03	.9357E-10	.2710E-03
.1270E 02	.3890E-01	.5160E-03	.1687E-06	.6563E-08	.3781E-03	.8706E-10	.2710E-03
.1280E 02	.3888E-01	.1200E-03	.1570E-06	.6103E-08	.3788E-03	.1883E-10	.2710E-03
.1290E 02	.3889E-01	.1200E-03	.1400E-06	.5679E-08	.3794E-03	.1752E-10	.2710E-03
.1300E 02	.3891E-01	.5717E-03	.1355E-06	.5285E-08	.3799E-03	.7766E-10	.2710E-03
.1310E 02	.3885E-01	.5720E-03	.1264E-06	.4909E-08	.3804E-03	.7228E-10	.2710E-03
.1320E 02	.3879E-01	.5720E-03	.1175E-06	.4560E-08	.3809E-03	.6723E-10	.2710E-03
.1330E 02	.3869E-01	.1472E-02	.1093E-06	.4230E-08	.3813E-03	.1609E-09	.2710E-03
.1340E 02	.3854E-01	.1472E-02	.1017E-06	.3920E-08	.3817E-03	.1497E-09	.2710E-03
.1350E 02	.3840E-01	.2292E-02	.9459E-07	.3632E-08	.3821E-03	.2168E-09	.2709E-03
.1360E 02	.3817E-01	.2292E-02	.8798E-07	.3358E-08	.3825E-03	.2017E-09	.2709E-03
.1370E 02	.3794E-01	.2292E-02	.8163E-07	.3104E-08	.3828E-03	.1876E-09	.2709E-03
.1380E 02	.3776E-01	.8720E-03	.7611E-07	.2875E-08	.3831E-03	.6637E-10	.2709E-03
.1390E 02	.3769E-01	.8720E-03	.7078E-07	.2668E-08	.3834E-03	.6172E-10	.2709E-03
.1400E 02	.3760E-01	.5858E-02	.6503E-07	.2475E-08	.3836E-03	.3856E-09	.2709E-03
.1410E 02	.3702E-01	.5660E-02	.6122E-07	.2266E-08	.3838E-03	.3588E-09	.2708E-03
.1420E 02	.3643E-01	.5660E-02	.5693E-07	.2074E-08	.3841E-03	.3336E-09	.2708E-03
.1430E 02	.3592E-01	.4288E-02	.5294E-07	.1902E-08	.3843E-03	.2270E-09	.2708E-03
.1440E 02	.3550E-01	.4288E-02	.4923E-07	.1748E-08	.3844E-03	.2111E-09	.2708E-03
.1450E 02	.3507E-01	.4800E-02	.4576E-07	.1605E-08	.3846E-03	.2197E-09	.2707E-03
.1460E 02	.3459E-01	.4800E-02	.4257E-07	.1472E-08	.3848E-03	.2043E-09	.2707E-03
.1470E 02	.3411E-01	.4800E-02	.3959E-07	.1350E-08	.3849E-03	.1900E-09	.2707E-03
.1480E 02	.3361E-01	.5232E-02	.3681E-07	.1237E-08	.3850E-03	.1926E-09	.2707E-03
.1490E 02	.3308E-01	.5232E-02	.3422E-07	.1132E-08	.3852E-03	.1791E-09	.2707E-03
.1500E 02	.3256E-01	.5584E-02	.3162E-07	.1036E-08	.3853E-03	.1777E-09	.2706E-03
.1510E 02	.3200E-01	.5584E-02	.2959E-07	.9468E-09	.3854E-03	.1652E-09	.2706E-03
.1520E 02	.3144E-01	.5584E-02	.2751E-07	.8649E-09	.3855E-03	.1536E-09	.2706E-03
.1530E 02	.3087E-01	.5844E-02	.2550E-07	.7895E-09	.3855E-03	.1495E-09	.2706E-03
.1540E 02	.3029E-01	.5844E-02	.2378E-07	.7201E-09	.3856E-03	.1390E-09	.2706E-03
.1550E 02	.2970E-01	.6008E-02	.2211E-07	.6566E-09	.3857E-03	.1328E-09	.2706E-03

CU-63(N, ALPHA)CU-60  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1560E 02	.2910E-01	-.6008E-02	.2055E-07	.5981E-09	.3357E-03	-.1235E-09	.2706E-03
.1570E 02	.2850E-01	-.6008E-02	.1911E-07	.5445E-09	.3858E-03	-.1148E-09	.2705E-03
.1580E 02	.2790E-01	-.6072E-02	.1776E-07	.4955E-09	.3858E-03	-.1078E-09	.2705E-03
.1590E 02	.2729E-01	-.6072E-02	.1651E-07	.4506E-09	.3859E-03	-.1003E-09	.2705E-03
.1600E 02	.2668E-01	-.6044E-02	.1535E-07	.4095E-09	.3859E-03	-.9277E-10	.2705E-03
.1610E 02	.2608E-01	-.6044E-02	.1427E-07	.3721E-09	.3860E-03	-.8623E-10	.2705E-03
.1620E 02	.2547E-01	-.6044E-02	.1326E-07	.3378E-09	.3860E-03	-.8016E-10	.2705E-03
.1630E 02	.2488E-01	-.5916E-02	.1233E-07	.3067E-09	.3860E-03	-.7293E-10	.2705E-03
.1640E 02	.2428E-01	-.5916E-02	.1146E-07	.2783E-09	.3861E-03	-.6779E-10	.2705E-03
.1650E 02	.2369E-01	-.5692E-02	.1065E-07	.2523E-09	.3861E-03	-.6063E-10	.2705E-03
.1660E 02	.2312E-01	-.5692E-02	.9900E-08	.2289E-09	.3861E-03	-.5635E-10	.2705E-03
.1670E 02	.2255E-01	-.5692E-02	.9202E-08	.2075E-09	.3861E-03	-.5238E-10	.2705E-03
.1680E 02	.2200E-01	-.5372E-02	.8553E-08	.1882E-09	.3862E-03	-.4595E-10	.2705E-03
.1690E 02	.2146E-01	-.5372E-02	.7949E-08	.1706E-09	.3862E-03	-.4270E-10	.2705E-03
.1700E 02	.2093E-01	-.4976E-02	.7388E-08	.1546E-09	.3862E-03	-.3677E-10	.2704E-03
.1710E 02	.2043E-01	-.4976E-02	.6867E-08	.1403E-09	.3862E-03	-.3417E-10	.2704E-03
.1720E 02	.1993E-01	-.4976E-02	.6382E-08	.1272E-09	.3862E-03	-.3176E-10	.2704E-03
.1730E 02	.1945E-01	-.4604E-02	.5931E-08	.1154E-09	.3862E-03	-.2731E-10	.2704E-03
.1740E 02	.1899E-01	-.4604E-02	.5512E-08	.1047E-09	.3863E-03	-.2538E-10	.2704E-03
.1750E 02	.1853E-01	-.4272E-02	.5123E-08	.9493E-10	.3863E-03	-.2189E-10	.2704E-03
.1760E 02	.1810E-01	-.4272E-02	.4761E-08	.8619E-10	.3863E-03	-.2034E-10	.2704E-03
.1770E 02	.1768E-01	-.4272E-02	.4424E-08	.7820E-10	.3863E-03	-.1890E-10	.2704E-03
.1780E 02	.1726E-01	-.3992E-02	.4111E-08	.7098E-10	.3863E-03	-.1641E-10	.2704E-03
.1790E 02	.1686E-01	-.3992E-02	.3821E-08	.6443E-10	.3863E-03	-.1525E-10	.2704E-03
.1800E 02	.1647E-01	-.3748E-02	.3550E-08	.5846E-10	.3863E-03	-.1331E-10	.2704E-03
.1810E 02	.1609E-01	-.3748E-02	.3299E-08	.5308E-10	.3863E-03	-.1237E-10	.2704E-03
.1820E 02	.1572E-01	-.3748E-02	.3066E-08	.4818E-10	.3863E-03	-.1149E-10	.2704E-03
.1830E 02	.1535E-01	-.3552E-02	.2849E-08	.4373E-10	.3863E-03	-.1012E-10	.2704E-03
.1840E 02	.1500E-01	-.3552E-02	.2647E-08	.3969E-10	.3863E-03	-.9403E-11	.2704E-03
.1850E 02	.1464E-01	-.3404E-02	.2460E-08	.3601E-10	.3863E-03	-.8373E-11	.2704E-03
.1860E 02	.1430E-01	-.3404E-02	.2286E-08	.3268E-10	.3863E-03	-.7780E-11	.2704E-03
.1870E 02	.1396E-01	-.3404E-02	.2124E-08	.2964E-10	.3863E-03	-.7229E-11	.2704E-03
.1880E 02	.1362E-01	-.3292E-02	.1973E-08	.2688E-10	.3863E-03	-.6496E-11	.2704E-03
.1890E 02	.1330E-01	-.3292E-02	.1833E-08	.2438E-10	.3863E-03	-.6036E-11	.2704E-03
.1900E 02	.1297E-01	-.3232E-02	.1703E-08	.2209E-10	.3863E-03	-.5506E-11	.2704E-03
.1910E 02	.1264E-01	-.3232E-02	.1583E-08	.2001E-10	.3863E-03	-.5115E-11	.2704E-03
.1920E 02	.1232E-01	-.3232E-02	.1471E-08	.1812E-10	.3863E-03	-.4753E-11	.2704E-03
.1930E 02	.1200E-01	-.3208E-02	.1366E-08	.1639E-10	.3863E-03	-.4383E-11	.2704E-03
.1940E 02	.1168E-01	-.3208E-02	.1269E-08	.1482E-10	.3863E-03	-.4072E-11	.2704E-03
.1950E 02	.1136E-01	-.3236E-02	.1179E-08	.1339E-10	.3863E-03	-.3816E-11	.2704E-03
.1960E 02	.1103E-01	-.3236E-02	.1096E-08	.1209E-10	.3863E-03	-.3546E-11	.2704E-03
.1970E 02	.1071E-01	-.3236E-02	.1018E-08	.1090E-10	.3863E-03	-.3294E-11	.2704E-03
.1980E 02	.1038E-01	-.3307E-02	.9457E-09	.9818E-11	.3864E-03	-.3128E-11	.2704E-03
.1990E 02	.1005E-01	-.3307E-02	.8786E-09	.8830E-11	.3864E-03	-.2906E-11	.2704E-03

SPECTRUM AVERAGE CROSS SECTION = .3864E-03

CU-65 (N, 2N) CU-64  
U-235 FISSION SPECTRUM



CU-65(N,2N)CU-64  
U-235 FISSION SPECTRUM

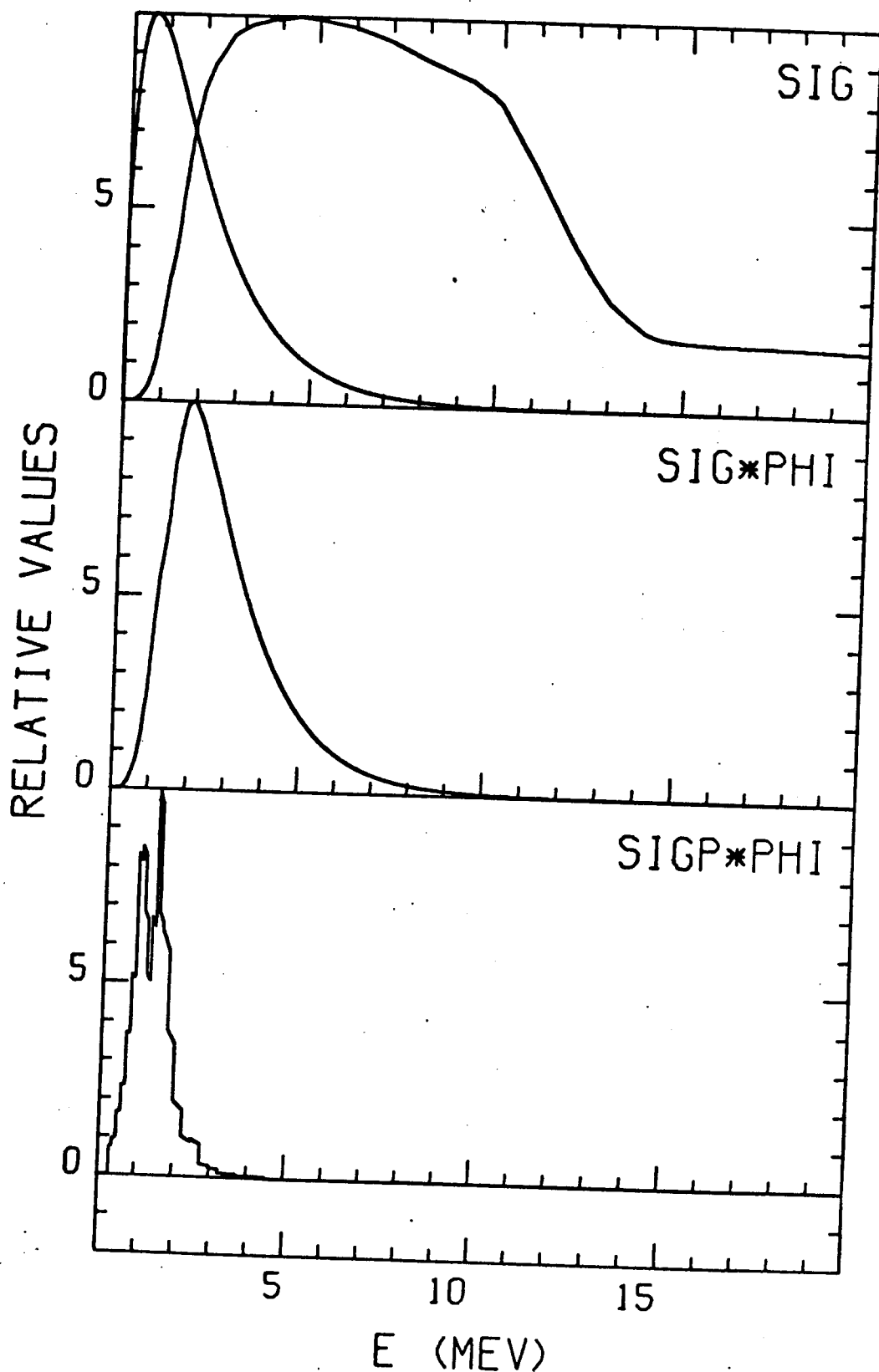
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.1010E 02	.3144E-02	.7859E-01	.1089E-05	.3425E-08	.7086E-07	.8561E-07	.3561E-05
.1020E 02	.1100E-01	.7859E-01	.1014E-05	.1116E-07	.8136E-06	.7973E-07	.1132E-04
.1030E 02	.1866E-01	.7859E-01	.9447E-06	.1782E-07	.2274E-05	.7425E-07	.1951E-04
.1040E 02	.2672E-01	.7859E-01	.8797E-06	.2351E-07	.4351E-05	.6914E-07	.2669E-04
.1050E 02	.3458E-01	.2396E 00	.8191E-06	.2832E-07	.6952E-05	.1963E-06	.3348E-04
.1060E 02	.5854E-01	.2396E 00	.7627E-06	.4465E-07	.1063E-04	.1828E-06	.5242E-04
.1070E 02	.8251E-01	.2396E 00	.7101E-06	.5859E-07	.1582E-04	.1702E-06	.7005E-04
.1080E 02	.1065E 00	.2396E 00	.6611E-06	.7039E-07	.2229E-04	.1584E-06	.8647E-04
.1090E 02	.1304E 00	.2396E 00	.6154E-06	.8028E-07	.2984E-04	.1475E-06	.1017E-03
.1100E 02	.1544E 00	.3180E 00	.5729E-06	.8846E-07	.3830E-04	.1822E-06	.1150E-03
.1110E 02	.1862E 00	.3180E 00	.5333E-06	.9931E-07	.4771E-04	.1696E-06	.1336E-03
.1120E 02	.2180E 00	.3180E 00	.4965E-06	.1082E-06	.5410E-04	.1579E-06	.1500E-03
.1130E 02	.2498E 00	.3180E 00	.4621E-06	.1154E-06	.6430E-04	.1469E-06	.1652E-03
.1140E 02	.2816E 00	.3180E 00	.4301E-06	.1211E-06	.8115E-04	.1368E-06	.1794E-03
.1150E 02	.3134E 00	.3240E 00	.4003E-06	.1255E-06	.9349E-04	.1297E-06	.1926E-03
.1160E 02	.3458E 00	.3240E 00	.3726E-06	.1288E-06	.1062E-03	.1207E-06	.2051E-03
.1170E 02	.3782E 00	.3240E 00	.3468E-06	.1311E-06	.1192E-03	.1123E-06	.2167E-03
.1180E 02	.4106E 00	.3240E 00	.3227E-06	.1325E-06	.1324E-03	.1046E-06	.2276E-03
.1190E 02	.4430E 00	.3240E 00	.3003E-06	.1330E-06	.1457E-03	.9730E-07	.2376E-03
.1200E 02	.4754E 00	.2965E 00	.2795E-06	.1329E-06	.1590E-03	.8286E-07	.2470E-03
.1210E 02	.5050E 00	.2965E 00	.2600E-06	.1313E-06	.1722E-03	.7710E-07	.2550E-03
.1220E 02	.5347E 00	.2760E 00	.2420E-06	.1294E-06	.1652E-03	.6679E-07	.2624E-03
.1230E 02	.5623E 00	.2760E 00	.2251E-06	.1266E-06	.1980E-03	.6214E-07	.2689E-03
.1240E 02	.5899E 00	.2560E 00	.2095E-06	.1236E-06	.2106E-03	.5363E-07	.2749E-03
.1250E 02	.6155E 00	.2560E 00	.1949E-06	.1200E-06	.2227E-03	.4990E-07	.2800E-03
.1260E 02	.6411E 00	.2370E 00	.1813E-06	.1163E-06	.2345E-03	.4298E-07	.2849E-03
.1270E 02	.6648E 00	.2370E 00	.1687E-06	.1122E-06	.2460E-03	.3998E-07	.2890E-03
.1280E 02	.6885E 00	.2195E 00	.1570E-06	.1081E-06	.2570E-03	.3445E-07	.2926E-03
.1290E 02	.7104E 00	.2195E 00	.1460E-06	.1037E-06	.2676E-03	.3205E-07	.2962E-03
.1300E 02	.7324E 00	.2020E 00	.1358E-06	.9949E-07	.2777E-03	.2744E-07	.2993E-03
.1310E 02	.7526E 00	.2020E 00	.1264E-06	.9510E-07	.2874E-03	.2552E-07	.3019E-03
.1320E 02	.7728E 00	.1855E 00	.1175E-06	.9084E-07	.2967E-03	.2180E-07	.3044E-03
.1330E 02	.7913E 00	.1855E 00	.1093E-06	.8652E-07	.3056E-03	.2028E-07	.3065E-03
.1340E 02	.8099E 00	.1705E 00	.1017E-06	.8237E-07	.3140E-03	.1734E-07	.3084E-03
.1350E 02	.8269E 00	.1705E 00	.9459E-07	.7823E-07	.3221E-03	.1613E-07	.3101E-03
.1360E 02	.8440E 00	.1555E 00	.8798E-07	.7426E-07	.3297E-03	.1368E-07	.3116E-03
.1370E 02	.8595E 00	.1555E 00	.8183E-07	.7034E-07	.3369E-03	.1272E-07	.3130E-03
.1380E 02	.8751E 00	.1405E 00	.7611E-07	.6660E-07	.3438E-03	.1069E-07	.3142E-03
.1390E 02	.8891E 00	.1405E 00	.7070E-07	.6294E-07	.3502E-03	.9945E-08	.3152E-03
.1400E 02	.9032E 00	.1250E 00	.6583E-07	.5946E-07	.3563E-03	.6229E-08	.3162E-03
.1410E 02	.9157E 00	.1250E 00	.6122E-07	.5606E-07	.3621E-03	.7653E-08	.3170E-03
.1420E 02	.9282E 00	.1095E 00	.5693E-07	.5285E-07	.3676E-03	.6235E-08	.3177E-03
.1430E 02	.9391E 00	.1095E 00	.5294E-07	.4972E-07	.3727E-03	.5797E-08	.3183E-03
.1440E 02	.9501E 00	.9401E-01	.4923E-07	.4678E-07	.3775E-03	.4628E-08	.3189E-03
.1450E 02	.9595E 00	.9400E-01	.4578E-07	.4393E-07	.3820E-03	.4304E-08	.3193E-03
.1460E 02	.9689E 00	.7751E-01	.4257E-07	.4125E-07	.3863E-03	.3300E-08	.3197E-03
.1470E 02	.9768E 00	.7750E-01	.3959E-07	.3866E-07	.3903E-03	.3068E-08	.3200E-03
.1480E 02	.9844E 00	.6201E-01	.3581E-07	.3623E-07	.3940E-03	.2282E-08	.3203E-03
.1490E 02	.9906E 00	.6200E-01	.3422E-07	.3390E-07	.3975E-03	.2122E-08	.3206E-03
.1500E 02	.9968E 00	.6600E-01	.3182E-07	.3172E-07	.4008E-03	.2100E-08	.3208E-03

CU-65(N,2N)CU-64  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.1510E 02	.1003E 01	.6600E-01	.2959E-07	.2969E-07	.4039E-03	.1953E-08	.3210E-03
.1520E 02	.1010E 01	.6000E-01	.2751E-07	.2778E-07	.4068E-03	.1651E-08	.3212E-03
.1530E 02	.1016E 01	.6000E-01	.2558E-07	.2598E-07	.4094E-03	.1535E-08	.3213E-03
.1540E 02	.1022E 01	.5001E-01	.2378E-07	.2430E-07	.4120E-03	.1189E-08	.3215E-03
.1550E 02	.1027E 01	.5000E-01	.2211E-07	.2270E-07	.4143E-03	.1105E-08	.3216E-03
.1560E 02	.1032E 01	.5000E-01	.2055E-07	.2121E-07	.4165E-03	.1028E-08	.3217E-03
.1570E 02	.1037E 01	.5000E-01	.1911E-07	.1981E-07	.4185E-03	.9553E-09	.3218E-03
.1580E 02	.1042E 01	.4000E-01	.1776E-07	.1851E-07	.4205E-03	.7105E-09	.3219E-03
.1590E 02	.1046E 01	.4000E-01	.1651E-07	.1727E-07	.4223E-03	.6604E-09	.3219E-03
.1600E 02	.1050E 01	.4000E-01	.1535E-07	.1612E-07	.4239E-03	.6139E-09	.3220E-03
.1610E 02	.1054E 01	.4000E-01	.1427E-07	.1504E-07	.4255E-03	.5707E-09	.3221E-03
.1620E 02	.1058E 01	.3001E-01	.1320E-07	.1403E-07	.4269E-03	.3980E-09	.3221E-03
.1630E 02	.1061E 01	.3000E-01	.1233E-07	.1306E-07	.4283E-03	.3698E-09	.3222E-03
.1640E 02	.1064E 01	.3499E-01	.1146E-07	.1219E-07	.4295E-03	.4010E-09	.3222E-03
.1650E 02	.1067E 01	.3500E-01	.1065E-07	.1137E-07	.4307E-03	.3728E-09	.3222E-03
.1660E 02	.1071E 01	.2500E-01	.9900E-08	.1060E-07	.4318E-03	.2476E-09	.3223E-03
.1670E 02	.1073E 01	.2500E-01	.9202E-08	.9878E-08	.4328E-03	.2300E-09	.3223E-03
.1680E 02	.1076E 01	.2500E-01	.8553E-08	.9203E-08	.4338E-03	.2139E-09	.3223E-03
.1690E 02	.1078E 01	.2500E-01	.7949E-08	.8573E-08	.4347E-03	.1987E-09	.3223E-03
.1700E 02	.1081E 01	.2500E-01	.7388E-08	.7987E-08	.4355E-03	.1847E-09	.3224E-03
.1710E 02	.1083E 01	.2500E-01	.6867E-08	.7440E-08	.4363E-03	.1717E-09	.3224E-03
.1720E 02	.1086E 01	.2000E-01	.6382E-08	.6931E-08	.4370E-03	.1277E-09	.3224E-03
.1730E 02	.1088E 01	.2000E-01	.5931E-08	.6453E-08	.4377E-03	.1186E-09	.3224E-03
.1740E 02	.1090E 01	.1501E-01	.5512E-08	.6008E-08	.4383E-03	.8271E-10	.3224E-03
.1750E 02	.1091E 01	.1500E-01	.5123E-08	.5591E-08	.4389E-03	.7684E-10	.3224E-03
.1760E 02	.1093E 01	.1500E-01	.4761E-08	.5203E-08	.4394E-03	.7141E-10	.3224E-03
.1770E 02	.1094E 01	.1500E-01	.4424E-08	.4842E-08	.4399E-03	.6636E-10	.3224E-03
.1780E 02	.1096E 01	.1500E-01	.4111E-08	.4506E-08	.4404E-03	.6166E-10	.3224E-03
.1790E 02	.1097E 01	.1500E-01	.3821E-08	.4193E-08	.4408E-03	.5731E-10	.3225E-03
.1800E 02	.1099E 01	.1500E-01	.3550E-08	.3902E-08	.4412E-03	.5325E-10	.3225E-03
.1810E 02	.1100E 01	.1500E-01	.3299E-08	.3631E-08	.4416E-03	.4949E-10	.3225E-03
.1820E 02	.1102E 01	.1000E-01	.3066E-08	.3378E-08	.4419E-03	.3067E-10	.3225E-03
.1830E 02	.1103E 01	.1000E-01	.2849E-08	.3142E-08	.4423E-03	.2849E-10	.3225E-03
.1840E 02	.1104E 01	.9999E-02	.2647E-08	.2922E-08	.4426E-03	.2647E-10	.3225E-03
.1850E 02	.1105E 01	.1000E-01	.2460E-08	.2718E-08	.4429E-03	.2460E-10	.3225E-03
.1860E 02	.1106E 01	.1000E-01	.2286E-08	.2528E-08	.4431E-03	.2286E-10	.3225E-03
.1870E 02	.1107E 01	.1000E-01	.2124E-08	.2351E-08	.4434E-03	.2124E-10	.3225E-03
.1880E 02	.1108E 01	.5004E-02	.1973E-08	.2186E-08	.4436E-03	.9873E-11	.3225E-03
.1890E 02	.1108E 01	.5000E-02	.1833E-08	.2032E-08	.4438E-03	.9167E-11	.3225E-03
.1900E 02	.1109E 01	.2997E-01	.1703E-08	.1889E-08	.4440E-03	.5106E-10	.3225E-03
.1910E 02	.1106E 01	.3000E-01	.1563E-08	.1750E-08	.4442E-03	.4748E-10	.3225E-03
.1920E 02	.1103E 01	.6995E-01	.1471E-08	.1622E-08	.4443E-03	.1323E-09	.3225E-03
.1930E 02	.1094E 01	.9000E-01	.1366E-08	.1495E-08	.4445E-03	.1230E-09	.3225E-03
.1940E 02	.1085E 01	.1450E 00	.1269E-08	.1377E-08	.4446E-03	.1840E-09	.3224E-03
.1950E 02	.1071E 01	.1450E 00	.1179E-08	.1262E-08	.4448E-03	.1710E-09	.3224E-03
.1960E 02	.1056E 01	.1790E 00	.1096E-08	.1157E-08	.4449E-03	.1961E-09	.3224E-03
.1970E 02	.1038E 01	.1790E 00	.1018E-08	.1057E-08	.4450E-03	.1822E-09	.3224E-03
.1980E 02	.1020E 01	.2030E 00	.9457E-09	.9648E-09	.4451E-03	.1920E-09	.3224E-03
.1990E 02	.9999E 00	.2030E 00	.8786E-09	.8785E-09	.4452E-03	.1783E-09	.3224E-03

SPECTRUM AVERAGE CROSS SECTION = .4453E-03

IN-115(N, N') IN-115M  
U-235 FISSION SPECTRUM



IN-115(N,N')IN-115M  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.4000E 00	.1250E-02	.2500E-01	.3497E-03	.4371E-06	.1364E-04	.8742E-05	.4382E-03
.5000E 00	.3750E-02	.4250E-01	.3623E-03	.1359E-05	.1035E-03	.1540E-04	.1336E-02
.6000E 00	.8000E-02	.6000E-01	.3678E-03	.2942E-05	.3193E-03	.2207E-04	.2896E-02
.7000E 00	.1400E-01	.9500E-01	.3661E-03	.5153E-05	.7255E-03	.3497E-04	.5119E-02
.8000E 00	.2350E-01	.1350E 00	.3647E-03	.8570E-05	.1414E-02	.4923E-04	.8617E-02
.9000E 00	.3700E-01	.2200E 00	.3584E-03	.1326E-04	.2510E-02	.7685E-04	.1353E-01
.1000E 01	.5900E-01	.2300E 00	.3501E-03	.2066E-04	.4214E-02	.8053E-04	.2133E-01
.1100E 01	.8200E-01	.1900E 00	.3403E-03	.2790E-04	.6650E-02	.6465E-04	.2926E-01
.1200E 01	.1010E 00	.1500E 00	.3294E-03	.3327E-04	.9715E-02	.4940E-04	.3561E-01
.1300E 01	.1160E 00	.2000E 00	.3177E-03	.3685E-04	.1323E-01	.6353E-04	.4047E-01
.1400E 01	.1360E 00	.3100E 00	.3055E-03	.4155E-04	.1715E-01	.9470E-04	.4674E-01
.1500E 01	.1670E 00	.2200E 00	.2930E-03	.4894E-04	.2169E-01	.6447E-04	.5599E-01
.1600E 01	.1690E 00	.2150E 00	.2805E-03	.5301E-04	.2679E-01	.6030E-04	.6229E-01
.1700E 01	.2105E 00	.2150E 00	.2679E-03	.5639E-04	.3227E-01	.5760E-04	.6819E-01
.1800E 01	.2320E 00	.1400E 00	.2554E-03	.5926E-04	.3806E-01	.3576E-04	.7379E-01
.1900E 01	.2460E 00	.1400E 00	.2432E-03	.5983E-04	.4401E-01	.3405E-04	.7728E-01
.2000E 01	.2600E 00	.8000E-01	.2312E-03	.6012E-04	.5001E-01	.1850E-04	.8059E-01
.2100E 01	.2680E 00	.8000E-01	.2196E-03	.5884E-04	.5596E-01	.1757E-04	.8239E-01
.2200E 01	.2760E 00	.8000E-01	.2083E-03	.5748E-04	.6178E-01	.1666E-04	.8410E-01
.2300E 01	.2824E 00	.4600E-01	.1973E-03	.5573E-04	.6745E-01	.9472E-05	.8540E-01
.2400E 01	.2872E 00	.4800E-01	.1868E-03	.5365E-04	.7291E-01	.8966E-05	.8632E-01
.2500E 01	.2920E 00	.5200E-01	.1767E-03	.5159E-04	.7817E-01	.9187E-05	.8719E-01
.2600E 01	.2972E 00	.5200E-01	.1670E-03	.4962E-04	.8323E-01	.8682E-05	.8808E-01
.2700E 01	.3024E 00	.5200E-01	.1577E-03	.4768E-04	.8810E-01	.8199E-05	.8893E-01
.2800E 01	.3060E 00	.2000E-01	.1488E-03	.4553E-04	.9276E-01	.2976E-05	.8948E-01
.2900E 01	.3080E 00	.2000E-01	.1403E-03	.4322E-04	.9720E-01	.2806E-05	.8977E-01
.3000E 01	.3100E 00	.1600E-01	.1323E-03	.4100E-04	.1014E 00	.2116E-05	.9004E-01
.3100E 01	.3116E 00	.1600E-01	.1246E-03	.3882E-04	.1054E 00	.1993E-05	.9024E-01
.3200E 01	.3132E 00	.1600E-01	.1173E-03	.3674E-04	.1092E 00	.1877E-05	.9044E-01
.3300E 01	.3144E 00	.8000E-02	.1104E-03	.3470E-04	.1127E 00	.8831E-06	.9057E-01
.3400E 01	.3152E 00	.8000E-02	.1038E-03	.3273E-04	.1161E 00	.8306E-06	.9066E-01
.3500E 01	.3160E 00	.8000E-02	.9762E-04	.3085E-04	.1193E 00	.7810E-06	.9074E-01
.3600E 01	.3168E 00	.8000E-02	.9175E-04	.2907E-04	.1223E 00	.7340E-06	.9082E-01
.3700E 01	.3176E 00	.8000E-02	.8619E-04	.2738E-04	.1251E 00	.6896E-06	.9089E-01
.3800E 01	.3182E 00	.4000E-02	.8095E-04	.2576E-04	.1278E 00	.3238E-06	.9094E-01
.3900E 01	.3186E 00	.4000E-02	.7599E-04	.2421E-04	.1303E 00	.3040E-06	.9097E-01
.4000E 01	.3190E 00	.4000E-02	.7132E-04	.2275E-04	.1326E 00	.2853E-06	.9100E-01
.4100E 01	.3194E 00	.4000E-02	.6691E-04	.2137E-04	.1348E 00	.2676E-06	.9103E-01
.4200E 01	.3198E 00	.4000E-02	.6276E-04	.2007E-04	.1369E 00	.2510E-06	.9105E-01
.4300E 01	.3202E 00	.4000E-02	.5884E-04	.1884E-04	.1388E 00	.2354E-06	.9108E-01
.4400E 01	.3206E 00	.4000E-02	.5516E-04	.1768E-04	.1406E 00	.2206E-06	.9110E-01
.4500E 01	.3210E 00	-.3999E-02	.5169E-04	.1659E-04	.1424E 00	-.2067E-06	.9112E-01
.4600E 01	.3206E 00	-.4000E-02	.4843E-04	.1553E-04	.1440E 00	-.1937E-06	.9110E-01
.4700E 01	.3202E 00	-.4000E-02	.4537E-04	.1453E-04	.1455E 00	-.1815E-06	.9108E-01
.4800E 01	.3198E 00	-.4000E-02	.4249E-04	.1359E-04	.1469E 00	-.1699E-06	.9106E-01
.4900E 01	.3194E 00	-.4000E-02	.3978E-04	.1271E-04	.1482E 00	-.1591E-06	.9105E-01
.5000E 01	.3190E 00	-.6000E-02	.3724E-04	.1188E-04	.1494E 00	-.2234E-06	.9103E-01
.5100E 01	.3184E 00	-.6000E-02	.3465E-04	.1110E-04	.1506E 00	-.2091E-06	.9101E-01
.5200E 01	.3178E 00	-.6000E-02	.3261E-04	.1036E-04	.1516E 00	-.1957E-06	.9099E-01
.5300E 01	.3172E 00	-.6000E-02	.3051E-04	.9677E-05	.1526E 00	-.1831E-06	.9097E-01

IN-115(N,N')IN-115M  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.5400E 01	.3166E 00	-.6000E-02	.2854E-04	.9035E-05	.1536E 00	-.1712E-06	.9095E-01
.5500E 01	.3160E 00	-.6000E-02	.2669E-04	.8434E-05	.1544E 00	-.1601E-06	.9094E-01
.5600E 01	.3154E 00	-.6000E-02	.2496E-04	.7871E-05	.1553E 00	-.1497E-06	.9092E-01
.5700E 01	.3148E 00	-.6000E-02	.2333E-04	.7345E-05	.1560E 00	-.1400E-06	.9091E-01
.5800E 01	.3142E 00	-.6000E-02	.2181E-04	.6853E-05	.1567E 00	-.1309E-06	.9089E-01
.5900E 01	.3136E 00	-.6000E-02	.2030E-04	.6393E-05	.1574E 00	-.1223E-06	.9088E-01
.6000E 01	.3130E 00	-.1100E-01	.1905E-04	.5963E-05	.1580E 00	-.2095E-06	.9087E-01
.6100E 01	.3119E 00	-.1100E-01	.1780E-04	.5552E-05	.1586E 00	-.1958E-06	.9085E-01
.6200E 01	.3108E 00	-.1100E-01	.1663E-04	.5168E-05	.1591E 00	-.1829E-06	.9083E-01
.6300E 01	.3097E 00	-.1100E-01	.1553E-04	.4811E-05	.1596E 00	-.1709E-06	.9081E-01
.6400E 01	.3086E 00	-.1100E-01	.1451E-04	.4477E-05	.1601E 00	-.1596E-06	.9079E-01
.6500E 01	.3075E 00	-.1100E-01	.1355E-04	.4166E-05	.1605E 00	-.1490E-06	.9078E-01
.6600E 01	.3064E 00	-.1100E-01	.1265E-04	.3877E-05	.1609E 00	-.1392E-06	.9076E-01
.6700E 01	.3053E 00	-.1100E-01	.1181E-04	.3607E-05	.1613E 00	-.1299E-06	.9075E-01
.6800E 01	.3042E 00	-.1100E-01	.1103E-04	.3355E-05	.1616E 00	-.1213E-06	.9074E-01
.6900E 01	.3031E 00	-.1100E-01	.1029E-04	.3120E-05	.1620E 00	-.1132E-06	.9073E-01
.7000E 01	.3020E 00	-.1500E-01	.9609E-05	.2902E-05	.1623E 00	-.1441E-06	.9072E-01
.7100E 01	.3005E 00	-.1500E-01	.8968E-05	.2695E-05	.1625E 00	-.1345E-06	.9070E-01
.7200E 01	.2990E 00	-.1500E-01	.8369E-05	.2502E-05	.1628E 00	-.1255E-06	.9069E-01
.7300E 01	.2975E 00	-.1500E-01	.7839E-05	.2323E-05	.1630E 00	-.1171E-06	.9068E-01
.7400E 01	.2960E 00	-.1500E-01	.7286E-05	.2157E-05	.1633E 00	-.1093E-06	.9067E-01
.7500E 01	.2945E 00	-.1500E-01	.6797E-05	.2002E-05	.1635E 00	-.1020E-06	.9065E-01
.7600E 01	.2930E 00	-.1500E-01	.6341E-05	.1858E-05	.1637E 00	-.9511E-07	.9065E-01
.7700E 01	.2915E 00	-.1500E-01	.5914E-05	.1724E-05	.1638E 00	-.8871E-07	.9064E-01
.7800E 01	.2900E 00	-.1500E-01	.5516E-05	.1600E-05	.1640E 00	-.8274E-07	.9063E-01
.7900E 01	.2885E 00	-.1500E-01	.5144E-05	.1484E-05	.1642E 00	-.7716E-07	.9062E-01
.8000E 01	.2870E 00	-.1300E-01	.4797E-05	.1377E-05	.1643E 00	-.6237E-07	.9061E-01
.8100E 01	.2857E 00	-.1300E-01	.4473E-05	.1278E-05	.1644E 00	-.5815E-07	.9061E-01
.8200E 01	.2844E 00	-.1300E-01	.4171E-05	.1186E-05	.1646E 00	-.5422E-07	.9060E-01
.8300E 01	.2831E 00	-.1300E-01	.3898E-05	.1101E-05	.1647E 00	-.5055E-07	.9060E-01
.8400E 01	.2818E 00	-.1300E-01	.3625E-05	.1022E-05	.1648E 00	-.4713E-07	.9059E-01
.8500E 01	.2805E 00	-.1300E-01	.3379E-05	.9479E-06	.1649E 00	-.4393E-07	.9059E-01
.8600E 01	.2792E 00	-.1300E-01	.3150E-05	.8794E-06	.1650E 00	-.4093E-07	.9058E-01
.8700E 01	.2779E 00	-.1300E-01	.2936E-05	.8159E-06	.1651E 00	-.3817E-07	.9058E-01
.8800E 01	.2766E 00	-.1300E-01	.2736E-05	.7568E-06	.1651E 00	-.3557E-07	.9057E-01
.8900E 01	.2753E 00	-.1300E-01	.2550E-05	.7020E-06	.1652E 00	-.3315E-07	.9057E-01
.9000E 01	.2740E 00	-.1200E-01	.2376E-05	.6511E-06	.1653E 00	-.2851E-07	.9057E-01
.9100E 01	.2728E 00	-.1200E-01	.2214E-05	.6040E-06	.1653E 00	-.2657E-07	.9056E-01
.9200E 01	.2716E 00	-.1200E-01	.2063E-05	.5603E-06	.1654E 00	-.2476E-07	.9056E-01
.9300E 01	.2698E 00	-.2400E-01	.1922E-05	.5186E-06	.1655E 00	-.4613E-07	.9056E-01
.9400E 01	.2674E 00	-.2400E-01	.1791E-05	.4789E-06	.1655E 00	-.4298E-07	.9055E-01
.9500E 01	.2650E 00	-.2000E-01	.1668E-05	.4421E-06	.1655E 00	-.3337E-07	.9055E-01
.9600E 01	.2630E 00	-.2000E-01	.1554E-05	.4087E-06	.1656E 00	-.3108E-07	.9055E-01
.9700E 01	.2610E 00	-.2000E-01	.1448E-05	.3778E-06	.1656E 00	-.2895E-07	.9054E-01
.9800E 01	.2586E 00	-.2800E-01	.1340E-05	.3487E-06	.1657E 00	-.3776E-07	.9054E-01
.9900E 01	.2558E 00	-.2800E-01	.1256E-05	.3213E-06	.1657E 00	-.3517E-07	.9054E-01
.1000E 02	.2530E 00	-.5299E-01	.1170E-05	.2959E-06	.1657E 00	-.6199E-07	.9053E-01
.1010E 02	.2477E 00	-.5300E-01	.1089E-05	.2698E-06	.1658E 00	-.5774E-07	.9053E-01
.1020E 02	.2424E 00	-.5300E-01	.1014E-05	.2459E-06	.1658E 00	-.5377E-07	.9052E-01
.1030E 02	.2371E 00	-.5300E-01	.9447E-06	.2240E-06	.1658E 00	-.5007E-07	.9052E-01



IN=115(N,N')IN=115M  
U=235 FISSI2N SPECTRUM

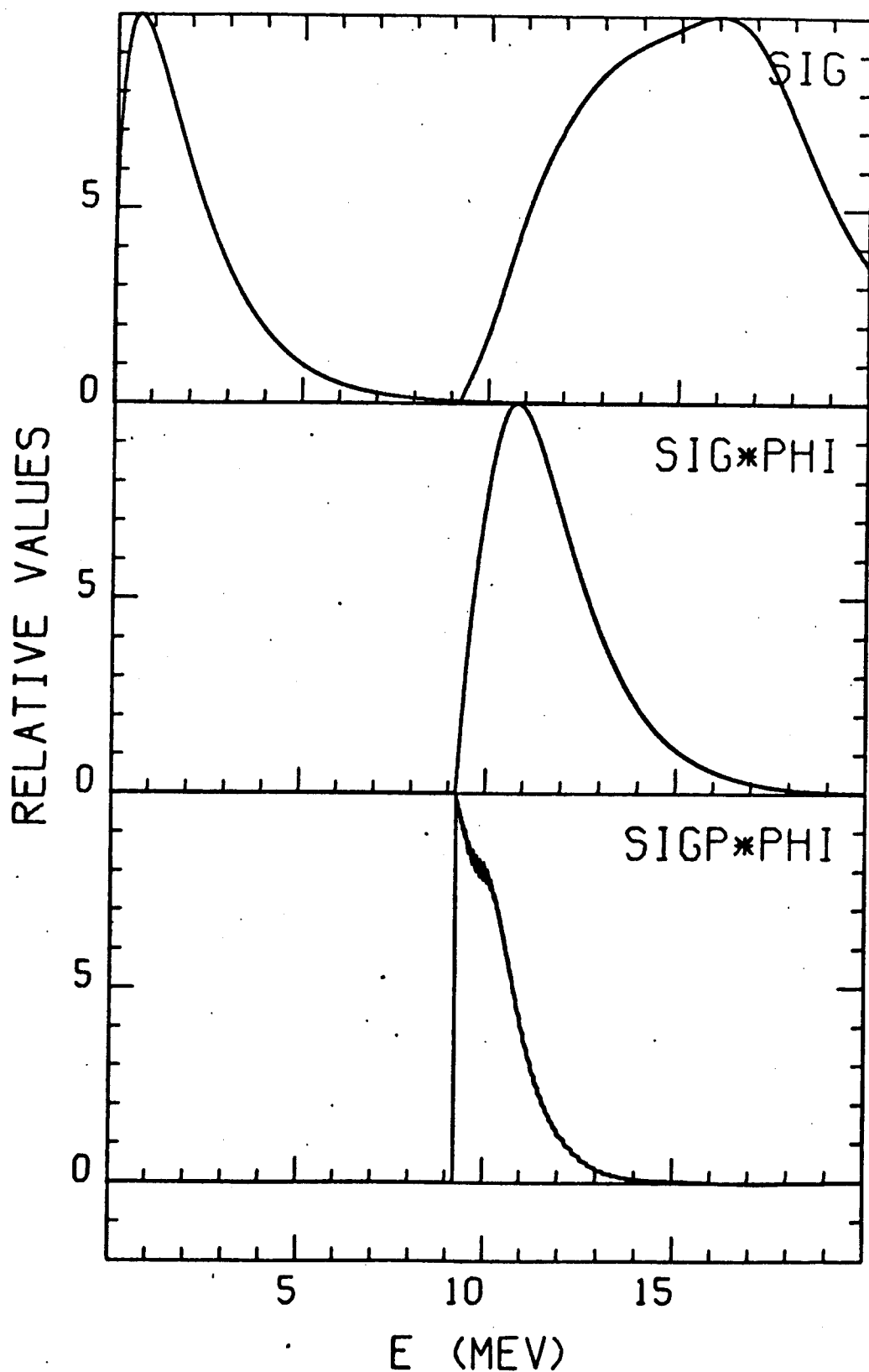
E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1040E 02	.2318E 00	-.5300E-01	.8797E-06	.2039E-06	.1658E 00	-.4662E-07	.9051E-01
.1050E 02	.2265E 00	-.5300E-01	.8191E-06	.1855E-06	.1658E 00	-.4341E-07	.9051E-01
.1060E 02	.2212E 00	-.5300E-01	.7627E-06	.1687E-06	.1659E 00	-.4042E-07	.9050E-01
.1070E 02	.2159E 00	-.5300E-01	.7101E-06	.1533E-06	.1659E 00	-.3763E-07	.9050E-01
.1080E 02	.2106E 00	-.5300E-01	.6611E-06	.1392E-06	.1659E 00	-.3504E-07	.9050E-01
.1090E 02	.2053E 00	-.5300E-01	.6154E-06	.1263E-06	.1659E 00	-.3262E-07	.9049E-01
.1100E 02	.2000E 00	-.5900E-01	.5729E-06	.1146E-06	.1659E 00	-.3380E-07	.9049E-01
.1110E 02	.1941E 00	-.5900E-01	.5333E-06	.1035E-06	.1659E 00	-.3147E-07	.9049E-01
.1120E 02	.1882E 00	-.5900E-01	.4965E-06	.9343E-07	.1659E 00	-.2929E-07	.9048E-01
.1130E 02	.1823E 00	-.5900E-01	.4621E-06	.8424E-07	.1660E 00	-.2726E-07	.9048E-01
.1140E 02	.1764E 00	-.5900E-01	.4301E-06	.7587E-07	.1660E 00	-.2538E-07	.9048E-01
.1150E 02	.1705E 00	-.5900E-01	.4003E-06	.6826E-07	.1660E 00	-.2362E-07	.9047E-01
.1160E 02	.1646E 00	-.5900E-01	.3726E-06	.6133E-07	.1660E 00	-.2198E-07	.9047E-01
.1170E 02	.1587E 00	-.5900E-01	.3468E-06	.5503E-07	.1660E 00	-.2046E-07	.9047E-01
.1180E 02	.1528E 00	-.5900E-01	.3227E-06	.4931E-07	.1660E 00	-.1904E-07	.9047E-01
.1190E 02	.1469E 00	-.5900E-01	.3003E-06	.4411E-07	.1660E 00	-.1772E-07	.9047E-01
.1200E 02	.1410E 00	-.5200E-01	.2795E-06	.3940E-07	.1660E 00	-.1453E-07	.9046E-01
.1210E 02	.1358E 00	-.5200E-01	.2600E-06	.3531E-07	.1660E 00	-.1352E-07	.9046E-01
.1220E 02	.1306E 00	-.5200E-01	.2420E-06	.3160E-07	.1660E 00	-.1258E-07	.9046E-01
.1230E 02	.1254E 00	-.5200E-01	.2251E-06	.2823E-07	.1660E 00	-.1171E-07	.9046E-01
.1240E 02	.1202E 00	-.5200E-01	.2095E-06	.2518E-07	.1660E 00	-.1089E-07	.9046E-01
.1250E 02	.1150E 00	-.4600E-01	.1949E-06	.2241E-07	.1660E 00	-.8966E-08	.9046E-01
.1260E 02	.1104E 00	-.4600E-01	.1813E-06	.2002E-07	.1660E 00	-.8342E-08	.9046E-01
.1270E 02	.1058E 00	-.4600E-01	.1687E-06	.1785E-07	.1660E 00	-.7761E-08	.9046E-01
.1280E 02	.1012E 00	-.4600E-01	.1570E-06	.1588E-07	.1660E 00	-.7220E-08	.9046E-01
.1290E 02	.9660E-01	-.4600E-01	.1460E-06	.1411E-07	.1660E 00	-.6717E-08	.9046E-01
.1300E 02	.9200E-01	-.2301E-01	.1358E-06	.1250E-07	.1660E 00	-.3804E-08	.9045E-01
.1310E 02	.8920E-01	-.2800E-01	.1264E-06	.1127E-07	.1660E 00	-.3538E-08	.9045E-01
.1320E 02	.8640E-01	-.2300E-01	.1175E-06	.1016E-07	.1660E 00	-.3291E-08	.9045E-01
.1330E 02	.8360E-01	-.2800E-01	.1093E-06	.9140E-08	.1660E 00	-.3061E-08	.9045E-01
.1340E 02	.8080E-01	-.2800E-01	.1017E-06	.8217E-08	.1660E 00	-.2848E-08	.9045E-01
.1350E 02	.7800E-01	-.2400E-01	.9459E-07	.7378E-08	.1660E 00	-.2270E-08	.9045E-01
.1360E 02	.7560E-01	-.2400E-01	.8798E-07	.6652E-08	.1660E 00	-.2112E-08	.9045E-01
.1370E 02	.7320E-01	-.2400E-01	.8183E-07	.5990E-08	.1660E 00	-.1964E-08	.9045E-01
.1380E 02	.7080E-01	-.2400E-01	.7611E-07	.5389E-08	.1660E 00	-.1827E-08	.9045E-01
.1390E 02	.6840E-01	-.2400E-01	.7078E-07	.4842E-08	.1660E 00	-.1699E-08	.9045E-01
.1400E 02	.6600E-01	-.1201E-01	.6563E-07	.4345E-08	.1660E 00	-.7903E-09	.9045E-01
.1410E 02	.6480E-01	-.1200E-01	.6122E-07	.3967E-08	.1660E 00	-.7347E-09	.9045E-01
.1420E 02	.6360E-01	-.1200E-01	.5693E-07	.3621E-08	.1660E 00	-.6832E-09	.9045E-01
.1430E 02	.6260E-01	-.8000E-02	.5294E-07	.3314E-08	.1660E 00	-.4236E-09	.9045E-01
.1440E 02	.6180E-01	-.8000E-02	.4923E-07	.3043E-08	.1660E 00	-.3939E-09	.9045E-01
.1450E 02	.6100E-01	-.4002E-02	.4578E-07	.2793E-08	.1660E 00	-.1832E-09	.9045E-01
.1460E 02	.6060E-01	-.4000E-02	.4257E-07	.2580E-08	.1660E 00	-.1703E-09	.9045E-01
.1470E 02	.6020E-01	-.4000E-02	.3959E-07	.2383E-08	.1660E 00	-.1583E-09	.9045E-01
.1480E 02	.5980E-01	-.4000E-02	.3681E-07	.2201E-08	.1660E 00	-.1472E-09	.9045E-01
.1490E 02	.5940E-01	-.4000E-02	.3422E-07	.2033E-08	.1660E 00	-.1369E-09	.9045E-01
.1500E 02	.5900E-01	-.2001E-02	.3162E-07	.1877E-08	.1660E 00	-.6368E-10	.9045E-01
.1510E 02	.5880E-01	-.2000E-02	.2959E-07	.1740E-08	.1660E 00	-.5917E-10	.9045E-01
.1520E 02	.5860E-01	-.2000E-02	.2751E-07	.1612E-08	.1660E 00	-.5502E-10	.9045E-01
.1530E 02	.5840E-01	-.2000E-02	.2558E-07	.1494E-08	.1660E 00	-.5115E-10	.9045E-01

IN=115(N,N')IN=115M  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1540E 02	.5320E-01	-.2000E-02	.2378E-07	.1384E-08	.1660E 00	-.4756E-10	.9045E-01
.1550E 02	.5800E-01	-.2000E-02	.2211E-07	.1282E-08	.1660E 00	-.4421E-10	.9045E-01
.1560E 02	.5780E-01	-.2000E-02	.2055E-07	.1188E-08	.1660E 00	-.4110E-10	.9045E-01
.1570E 02	.5760E-01	-.2000E-02	.1911E-07	.1100E-08	.1660E 00	-.3821E-10	.9045E-01
.1580E 02	.5740E-01	-.2000E-02	.1776E-07	.1019E-08	.1660E 00	-.3552E-10	.9045E-01
.1590E 02	.5720E-01	-.2000E-02	.1651E-07	.9444E-09	.1660E 00	-.3302E-10	.9045E-01
.1600E 02	.5700E-01	-.5000E-03	.1535E-07	.6748E-09	.1660E 00	-.7688E-11	.9045E-01
.1610E 02	.5695E-01	-.5000E-03	.1427E-07	.8125E-09	.1660E 00	-.7134E-11	.9045E-01
.1620E 02	.5690E-01	-.5000E-03	.1326E-07	.7546E-09	.1660E 00	-.6631E-11	.9045E-01
.1630E 02	.5685E-01	-.5000E-03	.1233E-07	.7008E-09	.1660E 00	-.6164E-11	.9045E-01
.1640E 02	.5680E-01	-.5000E-03	.1146E-07	.6509E-09	.1660E 00	-.5730E-11	.9045E-01
.1650E 02	.5675E-01	-.5000E-03	.1065E-07	.6045E-09	.1660E 00	-.5326E-11	.9045E-01
.1660E 02	.5670E-01	-.5000E-03	.9900E-08	.5613E-09	.1660E 00	-.4950E-11	.9045E-01
.1670E 02	.5665E-01	-.5000E-03	.9202E-08	.5213E-09	.1660E 00	-.4601E-11	.9045E-01
.1680E 02	.5660E-01	-.5000E-03	.8553E-08	.4841E-09	.1660E 00	-.4276E-11	.9045E-01
.1690E 02	.5655E-01	-.5000E-03	.7949E-08	.4495E-09	.1660E 00	-.3975E-11	.9045E-01
.1700E 02	.5650E-01	-.5000E-03	.7358E-08	.4174E-09	.1660E 00	-.3694E-11	.9045E-01
.1710E 02	.5645E-01	-.5000E-03	.6867E-08	.3876E-09	.1660E 00	-.3433E-11	.9045E-01
.1720E 02	.5640E-01	-.5000E-03	.6382E-08	.3599E-09	.1660E 00	-.3191E-11	.9045E-01
.1730E 02	.5635E-01	-.5000E-03	.5931E-08	.3342E-09	.1660E 00	-.2966E-11	.9045E-01
.1740E 02	.5630E-01	-.5000E-03	.5512E-08	.3103E-09	.1660E 00	-.2756E-11	.9045E-01
.1750E 02	.5625E-01	-.5000E-03	.5123E-08	.2881E-09	.1660E 00	-.2561E-11	.9045E-01
.1760E 02	.5620E-01	-.5000E-03	.4761E-08	.2675E-09	.1660E 00	-.2380E-11	.9045E-01
.1770E 02	.5615E-01	-.5000E-03	.4424E-08	.2484E-09	.1660E 00	-.2212E-11	.9045E-01
.1780E 02	.5610E-01	-.5000E-03	.4111E-08	.2306E-09	.1660E 00	-.2056E-11	.9045E-01
.1790E 02	.5605E-01	-.5000E-03	.3821E-08	.2141E-09	.1660E 00	-.1910E-11	.9045E-01
.1800E 02	.5600E-01	-.9996E-03	.3550E-08	.1988E-09	.1660E 00	-.3549E-11	.9045E-01
.1810E 02	.5590E-01	-.1000E-02	.3299E-08	.1844E-09	.1660E 00	-.3299E-11	.9045E-01
.1820E 02	.5580E-01	-.1000E-02	.3066E-08	.1711E-09	.1660E 00	-.3066E-11	.9045E-01
.1830E 02	.5570E-01	-.1000E-02	.2849E-08	.1587E-09	.1660E 00	-.2849E-11	.9045E-01
.1840E 02	.5560E-01	-.1000E-02	.2647E-08	.1472E-09	.1660E 00	-.2647E-11	.9045E-01
.1850E 02	.5550E-01	-.1000E-02	.2460E-08	.1365E-09	.1660E 00	-.2460E-11	.9045E-01
.1860E 02	.5540E-01	-.1000E-02	.2286E-08	.1266E-09	.1660E 00	-.2286E-11	.9045E-01
.1870E 02	.5530E-01	-.1000E-02	.2124E-08	.1174E-09	.1660E 00	-.2124E-11	.9045E-01
.1880E 02	.5520E-01	-.1000E-02	.1973E-08	.1089E-09	.1660E 00	-.1973E-11	.9045E-01
.1890E 02	.5510E-01	-.1000E-02	.1833E-08	.1010E-09	.1660E 00	-.1833E-11	.9045E-01
.1900E 02	.5500E-01	-.1000E-02	.1703E-08	.9369E-10	.1660E 00	-.1703E-11	.9045E-01
.1910E 02	.5490E-01	-.1000E-02	.1583E-08	.8689E-10	.1660E 00	-.1583E-11	.9045E-01
.1920E 02	.5480E-01	-.1000E-02	.1471E-08	.8058E-10	.1660E 00	-.1471E-11	.9045E-01
.1930E 02	.5470E-01	-.1000E-02	.1366E-08	.7473E-10	.1660E 00	-.1366E-11	.9045E-01
.1940E 02	.5460E-01	-.1000E-02	.1269E-08	.6931E-10	.1660E 00	-.1269E-11	.9045E-01
.1950E 02	.5450E-01	-.1000E-02	.1179E-08	.6427E-10	.1660E 00	-.1179E-11	.9045E-01
.1960E 02	.5440E-01	-.1000E-02	.1096E-08	.5960E-10	.1660E 00	-.1096E-11	.9045E-01
.1970E 02	.5430E-01	-.1000E-02	.1015E-08	.5527E-10	.1660E 00	-.1015E-11	.9045E-01
.1980E 02	.5420E-01	-.1000E-02	.9457E-09	.5126E-10	.1660E 00	-.9457E-12	.9045E-01
.1990E 02	.5410E-01	-.1000E-02	.8786E-09	.4753E-10	.1660E 00	-.8786E-12	.9045E-01

SPECTRUM AVERAGE CROSS SECTION = .1660E 00

I-127 (N, 2N) I-126  
U-235 FISSION SPECTRUM



I-127(N,2N)I-126  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.9300E 01	.2390E-01	.3459E 00	.1922E-05	.4594E-07	.1653E-05	.6650E-06	.4777E-04
.9400E 01	.5891E-01	.3578E 00	.1791E-05	.1055E-06	.9310E-05	.6407E-06	.1127E-03
.9500E 01	.9500E-01	.3727E 00	.1668E-05	.1585E-06	.2259E-04	.6218E-06	.1751E-03
.9600E 01	.1323E 00	.3875E 00	.1554E-05	.2056E-06	.4088E-04	.6022E-06	.2351E-03
.9700E 01	.1710E 00	.4062E 00	.1448E-05	.2476E-06	.6362E-04	.5880E-06	.2933E-03
.9800E 01	.2116E 00	.4236E 00	.1348E-05	.2854E-06	.9034E-04	.5779E-06	.3501E-03
.9900E 01	.2545E 00	.4550E 00	.1256E-05	.3196E-06	.1207E-03	.5714E-06	.4059E-03
.1000E 02	.3000E 00	.4835E 00	.1170E-05	.3509E-06	.1543E-03	.5656E-06	.4610E-03
.1010E 02	.3483E 00	.5078E 00	.1089E-05	.3795E-06	.1908E-03	.5532E-06	.5156E-03
.1020E 02	.3991E 00	.5259E 00	.1014E-05	.4049E-06	.2301E-03	.5335E-06	.5690E-03
.1030E 02	.4517E 00	.5383E 00	.9447E-06	.4267E-06	.2718E-03	.5085E-06	.6205E-03
.1040E 02	.5055E 00	.5445E 00	.8797E-06	.4447E-06	.3154E-03	.4790E-06	.6656E-03
.1050E 02	.5600E 00	.5452E 00	.8191E-06	.4587E-06	.3606E-03	.4466E-06	.7158E-03
.1060E 02	.6145E 00	.5415E 00	.7627E-06	.4687E-06	.4070E-03	.4130E-06	.7589E-03
.1070E 02	.6687E 00	.5340E 00	.7101E-06	.4748E-06	.4542E-03	.3792E-06	.7987E-03
.1080E 02	.7221E 00	.5224E 00	.6611E-06	.4773E-06	.5018E-03	.3453E-06	.8353E-03
.1090E 02	.7743E 00	.5069E 00	.6154E-06	.4765E-06	.5496E-03	.3120E-06	.8686E-03
.1100E 02	.8250E 00	.4881E 00	.5729E-06	.4727E-06	.5970E-03	.2796E-06	.8987E-03
.1110E 02	.8738E 00	.4689E 00	.5333E-06	.4660E-06	.6440E-03	.2501E-06	.9257E-03
.1120E 02	.9207E 00	.4498E 00	.4965E-06	.4571E-06	.6901E-03	.2233E-06	.9498E-03
.1130E 02	.9657E 00	.4312E 00	.4621E-06	.4462E-06	.7353E-03	.1993E-06	.9713E-03
.1140E 02	.1009E 01	.4120E 00	.4301E-06	.4339E-06	.7793E-03	.1772E-06	.9905E-03
.1150E 02	.1050E 01	.3940E 00	.4003E-06	.4203E-06	.8220E-03	.1577E-06	.1008E-02
.1160E 02	.1089E 01	.3760E 00	.3726E-06	.4059E-06	.8633E-03	.1401E-06	.1023E-02
.1170E 02	.1127E 01	.3590E 00	.3468E-06	.3908E-06	.9031E-03	.1245E-06	.1036E-02
.1180E 02	.1163E 01	.3430E 00	.3227E-06	.3753E-06	.9414E-03	.1107E-06	.1048E-02
.1190E 02	.1197E 01	.3280E 00	.3003E-06	.3595E-06	.9782E-03	.9850E-07	.1059E-02
.1200E 02	.1230E 01	.3060E 00	.2795E-06	.3437E-06	.1013E-02	.8552E-07	.1068E-02
.1210E 02	.1261E 01	.3060E 00	.2600E-06	.3278E-06	.1047E-02	.7957E-07	.1077E-02
.1220E 02	.1291E 01	.2775E 00	.2420E-06	.3124E-06	.1079E-02	.6715E-07	.1084E-02
.1230E 02	.1319E 01	.2775E 00	.2251E-06	.2970E-06	.1109E-02	.6248E-07	.1091E-02
.1240E 02	.1347E 01	.2495E 00	.2095E-06	.2821E-06	.1138E-02	.5227E-07	.1097E-02
.1250E 02	.1372E 01	.2495E 00	.1949E-06	.2674E-06	.1166E-02	.4863E-07	.1102E-02
.1260E 02	.1397E 01	.2220E 00	.1813E-06	.2533E-06	.1192E-02	.4026E-07	.1107E-02
.1270E 02	.1419E 01	.2220E 00	.1687E-06	.2394E-06	.1216E-02	.3745E-07	.1111E-02
.1280E 02	.1441E 01	.1950E 00	.1570E-06	.2262E-06	.1240E-02	.3061E-07	.1114E-02
.1290E 02	.1460E 01	.1950E 00	.1460E-06	.2133E-06	.1262E-02	.2847E-07	.1117E-02
.1300E 02	.1480E 01	.1695E 00	.1358E-06	.2010E-06	.1282E-02	.2303E-07	.1120E-02
.1310E 02	.1497E 01	.1695E 00	.1264E-06	.1892E-06	.1302E-02	.2142E-07	.1122E-02
.1320E 02	.1514E 01	.1460E 00	.1175E-06	.1779E-06	.1320E-02	.1716E-07	.1124E-02
.1330E 02	.1528E 01	.1460E 00	.1093E-06	.1671E-06	.1337E-02	.1596E-07	.1126E-02
.1340E 02	.1543E 01	.1265E 00	.1017E-06	.1569E-06	.1354E-02	.1287E-07	.1127E-02
.1350E 02	.1556E 01	.1265E 00	.9459E-07	.1472E-06	.1369E-02	.1197E-07	.1129E-02
.1360E 02	.1568E 01	.1105E 00	.8796E-07	.1380E-06	.1383E-02	.9723E-08	.1130E-02
.1370E 02	.1579E 01	.1105E 00	.8183E-07	.1293E-06	.1396E-02	.9042E-08	.1131E-02
.1380E 02	.1590E 01	.9751E-01	.7611E-07	.1211E-06	.1409E-02	.7421E-08	.1131E-02
.1390E 02	.1600E 01	.9750E-01	.7078E-07	.1133E-06	.1421E-02	.6901E-08	.1132E-02
.1400E 02	.1610E 01	.8800E-01	.6583E-07	.1060E-06	.1432E-02	.5793E-08	.1133E-02
.1410E 02	.1619E 01	.8900E-01	.6122E-07	.9910E-07	.1442E-02	.5387E-08	.1133E-02
.1420E 02	.1628E 01	.6101E-01	.5693E-07	.9267E-07	.1451E-02	.4612E-08	.1134E-02

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U-235 FISSION SPECTRUM

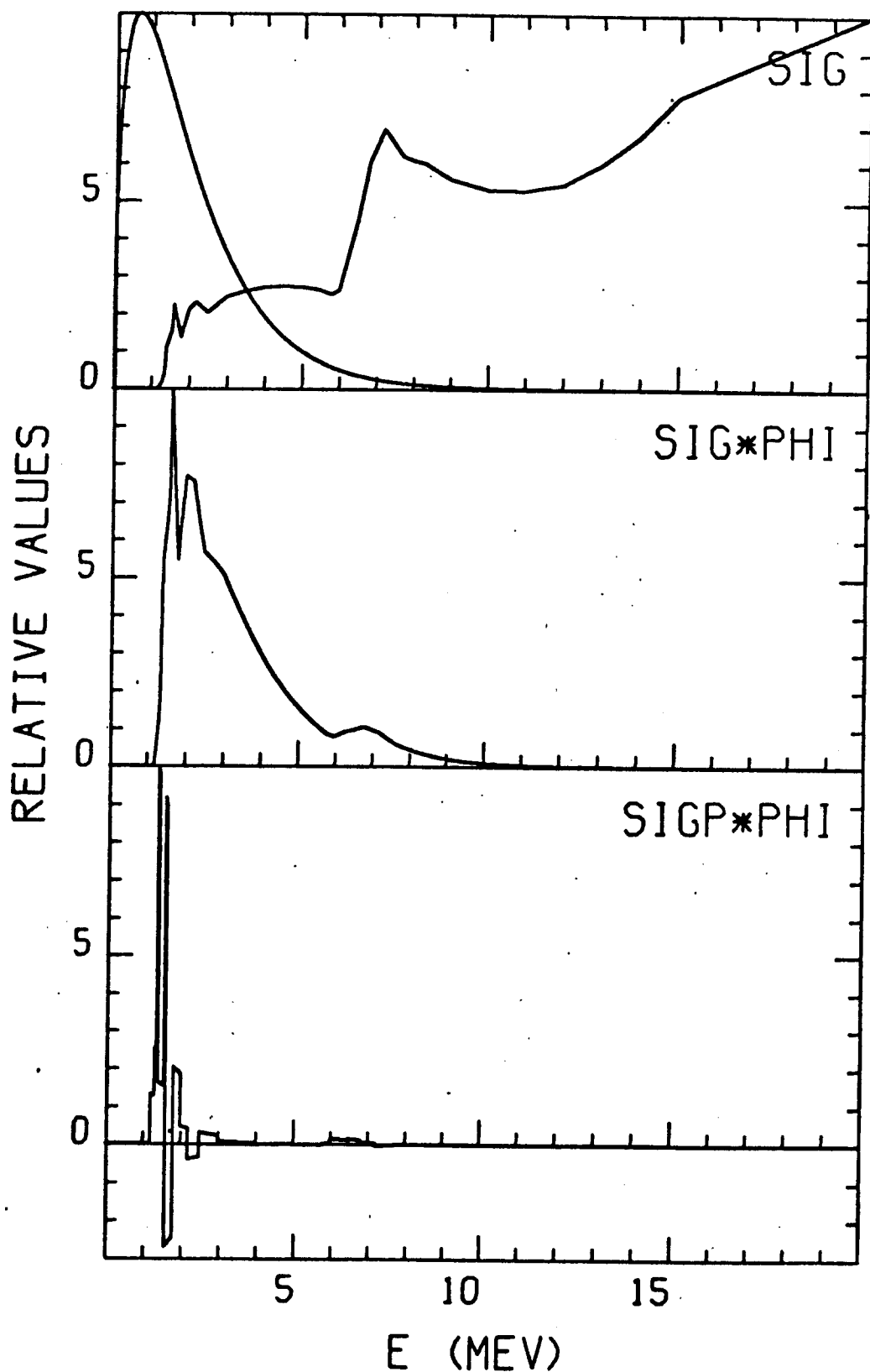
E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1430E 02	.1636E 01	.8100E-01	.5294E-07	.8660E-07	.1460E-02	.4289E-08	.1134E-02
.1440E 02	.1644E 01	.7700E-01	.4923E-07	.8093E-07	.1469E-02	.3791E-08	.1135E-02
.1450E 02	.1651E 01	.7700E-01	.4578E-07	.7561E-07	.1477E-02	.3525E-08	.1135E-02
.1460E 02	.1659E 01	.7600E-01	.4257E-07	.7064E-07	.1484E-02	.3235E-08	.1136E-02
.1470E 02	.1667E 01	.7600E-01	.3954E-07	.6598E-07	.1491E-02	.3009E-08	.1136E-02
.1480E 02	.1674E 01	.7800E-01	.3661E-07	.6163E-07	.1497E-02	.2871E-08	.1136E-02
.1490E 02	.1682E 01	.7800E-01	.3422E-07	.5757E-07	.1503E-02	.2670E-08	.1136E-02
.1500E 02	.1690E 01	.8100E-01	.3182E-07	.5378E-07	.1509E-02	.2578E-08	.1137E-02
.1510E 02	.1698E 01	.8100E-01	.2959E-07	.5024E-07	.1514E-02	.2397E-08	.1137E-02
.1520E 02	.1706E 01	.7800E-01	.2751E-07	.4693E-07	.1519E-02	.2146E-08	.1137E-02
.1530E 02	.1714E 01	.7800E-01	.2558E-07	.4384E-07	.1523E-02	.1995E-08	.1137E-02
.1540E 02	.1722E 01	.6751E-01	.2378E-07	.4094E-07	.1527E-02	.1605E-08	.1138E-02
.1550E 02	.1729E 01	.6750E-01	.2211E-07	.3821E-07	.1531E-02	.1492E-08	.1138E-02
.1560E 02	.1735E 01	.4951E-01	.2055E-07	.3566E-07	.1535E-02	.1017E-08	.1138E-02
.1570E 02	.1740E 01	.4950E-01	.1911E-07	.3325E-07	.1538E-02	.9457E-09	.1138E-02
.1580E 02	.1745E 01	.2401E-01	.1776E-07	.3100E-07	.1542E-02	.4265E-09	.1138E-02
.1590E 02	.1748E 01	.2400E-01	.1651E-07	.2885E-07	.1545E-02	.3963E-09	.1138E-02
.1600E 02	.1750E 01	-.8978E-02	.1535E-07	.2686E-07	.1547E-02	-.1378E-09	.1138E-02
.1610E 02	.1749E 01	-.9000E-02	.1427E-07	.2496E-07	.1550E-02	-.1284E-09	.1138E-02
.1620E 02	.1748E 01	-.4798E-01	.1326E-07	.2319E-07	.1552E-02	-.6363E-09	.1138E-02
.1630E 02	.1743E 01	-.4800E-01	.1233E-07	.2149E-07	.1555E-02	-.5917E-09	.1138E-02
.1640E 02	.1739E 01	-.9397E-01	.1146E-07	.1992E-07	.1557E-02	-.1077E-08	.1138E-02
.1650E 02	.1729E 01	-.9400E-01	.1065E-07	.1842E-07	.1559E-02	-.1001E-08	.1138E-02
.1660E 02	.1720E 01	-.1455E 00	.9900E-08	.1703E-07	.1560E-02	-.1440E-08	.1138E-02
.1670E 02	.1705E 01	-.1455E 00	.9202E-08	.1569E-07	.1562E-02	-.1339E-08	.1138E-02
.1680E 02	.1691E 01	-.2035E 00	.8553E-08	.1446E-07	.1564E-02	-.1740E-08	.1137E-02
.1690E 02	.1670E 01	-.2035E 00	.7949E-08	.1328E-07	.1565E-02	-.1618E-08	.1137E-02
.1700E 02	.1650E 01	-.2650E 00	.7368E-08	.1219E-07	.1566E-02	-.1958E-08	.1137E-02
.1710E 02	.1624E 01	-.2650E 00	.6667E-08	.1115E-07	.1567E-02	-.1820E-08	.1137E-02
.1720E 02	.1597E 01	-.3170E 00	.6362E-08	.1019E-07	.1568E-02	-.2023E-08	.1137E-02
.1730E 02	.1565E 01	-.3170E 00	.5931E-08	.9284E-08	.1569E-02	-.1880E-08	.1137E-02
.1740E 02	.1534E 01	-.3570E 00	.5512E-08	.8453E-08	.1570E-02	-.1968E-08	.1136E-02
.1750E 02	.1498E 01	-.3570E 00	.5123E-08	.7673E-08	.1571E-02	-.1829E-08	.1136E-02
.1760E 02	.1462E 01	-.3850E 00	.4761E-08	.6961E-08	.1572E-02	-.1833E-08	.1136E-02
.1770E 02	.1424E 01	-.3850E 00	.4424E-08	.6299E-08	.1573E-02	-.1703E-08	.1136E-02
.1780E 02	.1385E 01	-.4010E 00	.4111E-08	.5695E-08	.1573E-02	-.1649E-08	.1136E-02
.1790E 02	.1345E 01	-.4010E 00	.3821E-08	.5139E-08	.1574E-02	-.1532E-08	.1136E-02
.1800E 02	.1305E 01	-.4055E 00	.3550E-08	.4633E-08	.1574E-02	-.1440E-08	.1135E-02
.1810E 02	.1264E 01	-.4055E 00	.3299E-08	.4172E-08	.1575E-02	-.1338E-08	.1135E-02
.1820E 02	.1224E 01	-.4035E 00	.3066E-08	.3752E-08	.1575E-02	-.1237E-08	.1135E-02
.1830E 02	.1184E 01	-.4035E 00	.2849E-08	.3372E-08	.1575E-02	-.1149E-08	.1135E-02
.1840E 02	.1143E 01	-.3955E 00	.2647E-08	.3026E-08	.1576E-02	-.1047E-08	.1135E-02
.1850E 02	.1104E 01	-.3955E 00	.2460E-08	.2715E-08	.1576E-02	-.9728E-09	.1135E-02
.1860E 02	.1064E 01	-.3823E 00	.2286E-08	.2432E-08	.1576E-02	-.8738E-09	.1135E-02
.1870E 02	.1026E 01	-.3823E 00	.2124E-08	.2179E-08	.1576E-02	-.8119E-09	.1135E-02
.1880E 02	.9876E 00	-.3632E 00	.1973E-08	.1949E-08	.1577E-02	-.7167E-09	.1135E-02
.1890E 02	.9513E 00	-.3632E 00	.1833E-08	.1744E-08	.1577E-02	-.6659E-09	.1134E-02
.1900E 02	.9150E 00	-.3395E 00	.1703E-08	.1559E-08	.1577E-02	-.5783E-09	.1134E-02
.1910E 02	.8811E 00	-.3394E 00	.1583E-08	.1394E-08	.1577E-02	-.5373E-09	.1134E-02
.1920E 02	.8471E 00	-.3147E 00	.1471E-08	.1246E-08	.1577E-02	-.4628E-09	.1134E-02

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U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.1930E 02	.8156E 00	-.3147E 00	.1366E-08	.1114E-08	.1577E-02	-.4300E-09	.1134E-02
.1940E 02	.7842E 00	-.2900E 00	.1269E-08	.9954E-09	.1577E-02	-.3681E-09	.1134E-02
.1950E 02	.7552E 00	-.2900E 00	.1179E-08	.8906E-09	.1578E-02	-.3420E-09	.1134E-02
.1960E 02	.7262E 00	-.2653E 00	.1096E-08	.7956E-09	.1578E-02	-.2907E-09	.1134E-02
.1970E 02	.6996E 00	-.2653E 00	.1018E-08	.7122E-09	.1578E-02	-.2701E-09	.1134E-02
.1980E 02	.6731E 00	-.2406E 00	.9457E-09	.6365E-09	.1578E-02	-.2275E-09	.1134E-02
.1990E 02	.6491E 00	-.2405E 00	.8786E-09	.5702E-09	.1578E-02	-.2113E-09	.1134E-02

SPECTRUM AVERAGE CROSS SECTION = .1578E-02

TH-232 (N, FISSION)  
U-235 FISSION SPECTRUM



TH-232(N,F)SSION  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.1300E 01	.1000E-01	.2000E 00	.3177E-03	.3177E-05	.1624E-03	.6353E-04	.3300E-02
.1400E 01	.6000E-01	.1333E 00	.3055E-03	.1833E-04	.1022E-02	.4073E-04	.1677E-01
.1500E 01	.7333E-01	.1333E 00	.2930E-03	.2149E-04	.3017E-02	.3907E-04	.2276E-01
.1600E 01	.1200E 00	-.2400E 00	.2605E-03	.3365E-04	.5551E-02	-.6731E-04	.3593E-01
.1700E 01	.9600E-01	-.2400E 00	.2679E-03	.2572E-04	.8511E-02	-.6429E-04	.2935E-01
.1800E 01	.7200E-01	.2000E 00	.2554E-03	.1839E-04	.1071E-01	.5109E-04	.2319E-01
.1900E 01	.9200E-01	.2000E 00	.2432E-03	.2238E-04	.1275E-01	.4864E-04	.2617E-01
.2000E 01	.1120E 00	.5000E-01	.2312E-03	.2590E-04	.1517E-01	.1156E-04	.3288E-01
.2100E 01	.1170E 00	.5000E-01	.2196E-03	.2569E-04	.1775E-01	.1098E-04	.3401E-01
.2200E 01	.1220E 00	-.4667E-01	.2083E-03	.2541E-04	.2031E-01	-.9719E-05	.3506E-01
.2300E 01	.1173E 00	-.4667E-01	.1973E-03	.2315E-04	.2273E-01	-.9209E-05	.3411E-01
.2400E 01	.1127E 00	-.4667E-01	.1666E-03	.2105E-04	.2494E-01	-.8717E-05	.3321E-01
.2500E 01	.1080E 00	.4400E-01	.1767E-03	.1908E-04	.2694E-01	.7773E-05	.3238E-01
.2600E 01	.1124E 00	.4400E-01	.1670E-03	.1877E-04	.2884E-01	.7346E-05	.3314E-01
.2700E 01	.1168E 00	.4400E-01	.1577E-03	.1842E-04	.3070E-01	.6937E-05	.3305E-01
.2800E 01	.1212E 00	.4400E-01	.1486E-03	.1803E-04	.3252E-01	.6547E-05	.3453E-01
.2900E 01	.1256E 00	.4400E-01	.1403E-03	.1762E-04	.3430E-01	.6174E-05	.3516E-01
.3000E 01	.1300E 00	.1600E-01	.1323E-03	.1719E-04	.3604E-01	.2116E-05	.3576E-01
.3100E 01	.1316E 00	.1600E-01	.1246E-03	.1640E-04	.3772E-01	.1993E-05	.3596E-01
.3200E 01	.1332E 00	.1600E-01	.1173E-03	.1562E-04	.3932E-01	.1877E-05	.3616E-01
.3300E 01	.1348E 00	.1600E-01	.1104E-03	.1488E-04	.4085E-01	.1766E-05	.3634E-01
.3400E 01	.1364E 00	.1600E-01	.1036E-03	.1416E-04	.4230E-01	.1661E-05	.3651E-01
.3500E 01	.1380E 00	.1000E-01	.9762E-04	.1347E-04	.4368E-01	.9762E-06	.3667E-01
.3600E 01	.1390E 00	.1000E-01	.9175E-04	.1275E-04	.4499E-01	.9175E-06	.3676E-01
.3700E 01	.1400E 00	.1000E-01	.8619E-04	.1207E-04	.4623E-01	.8619E-06	.3685E-01
.3800E 01	.1410E 00	.1000E-01	.8095E-04	.1141E-04	.4740E-01	.8095E-06	.3694E-01
.3900E 01	.1420E 00	.1000E-01	.7599E-04	.1079E-04	.4851E-01	.7599E-06	.3702E-01
.4000E 01	.1430E 00	.4000E-02	.7132E-04	.1020E-04	.4956E-01	.2853E-06	.3709E-01
.4100E 01	.1434E 00	.4000E-02	.6691E-04	.9595E-05	.5055E-01	.2676E-06	.3712E-01
.4200E 01	.1438E 00	.4000E-02	.6276E-04	.9024E-05	.5148E-01	.2510E-06	.3714E-01
.4300E 01	.1442E 00	.4000E-02	.5884E-04	.8485E-05	.5236E-01	.2354E-06	.3717E-01
.4400E 01	.1446E 00	.4000E-02	.5516E-04	.7976E-05	.5318E-01	.2206E-06	.3719E-01
.4500E 01	.1450E 00	-.2000E-02	.5169E-04	.7496E-05	.5395E-01	-.1034E-06	.3721E-01
.4600E 01	.1448E 00	-.2000E-02	.4843E-04	.7013E-05	.5468E-01	-.9687E-07	.3720E-01
.4700E 01	.1446E 00	-.2000E-02	.4537E-04	.6560E-05	.5535E-01	-.9073E-07	.3719E-01
.4800E 01	.1444E 00	-.2000E-02	.4249E-04	.6135E-05	.5599E-01	-.8497E-07	.3718E-01
.4900E 01	.1442E 00	-.2000E-02	.3978E-04	.5736E-05	.5658E-01	-.7956E-07	.3717E-01
.5000E 01	.1440E 00	-.8000E-02	.3724E-04	.5362E-05	.5714E-01	-.2979E-06	.3717E-01
.5100E 01	.1432E 00	-.8000E-02	.3465E-04	.4991E-05	.5765E-01	-.2788E-06	.3714E-01
.5200E 01	.1424E 00	-.8000E-02	.3261E-04	.4644E-05	.5814E-01	-.2609E-06	.3711E-01
.5300E 01	.1416E 00	-.8000E-02	.3051E-04	.4320E-05	.5858E-01	-.2441E-06	.3709E-01
.5400E 01	.1408E 00	-.8000E-02	.2854E-04	.4018E-05	.5900E-01	-.2283E-06	.3706E-01
.5500E 01	.1400E 00	-.2000E-01	.2669E-04	.3736E-05	.5939E-01	-.5338E-06	.3704E-01
.5600E 01	.1380E 00	-.2000E-01	.2496E-04	.3444E-05	.5975E-01	-.4991E-06	.3699E-01
.5700E 01	.1360E 00	-.2000E-01	.2333E-04	.3173E-05	.6008E-01	-.4666E-06	.3694E-01
.5800E 01	.1340E 00	.3000E-01	.2161E-04	.2923E-05	.6038E-01	.6542E-06	.3690E-01
.5900E 01	.1370E 00	.3000E-01	.2038E-04	.2793E-05	.6067E-01	.6115E-06	.3696E-01
.6000E 01	.1400E 00	.2000E 00	.1905E-04	.2667E-05	.6094E-01	.3810E-05	.3702E-01
.6100E 01	.1600E 00	.2000E 00	.1730E-04	.2848E-05	.6122E-01	.3560E-05	.3739E-01
.6200E 01	.1800E 00	.2000E 00	.1663E-04	.2993E-05	.6151E-01	.3326E-05	.3773E-01



TH-232(N,FISSION)  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.6300E 01	.2000E 00	.2000E 00	.1553E-04	.3107E-05	.6181E-01	.3107E-05	.3605E-01
.6400E 01	.2200E 00	.2000E 00	.1451E-04	.3192E-05	.6213E-01	.2902E-05	.3635E-01
.6500E 01	.2400E 00	.2667E 00	.1355E-04	.3252E-05	.6245E-01	.3613E-05	.3664E-01
.6600E 01	.2667E 00	.2667E 00	.1265E-04	.3374E-05	.6278E-01	.3374E-05	.3699E-01
.6700E 01	.2933E 00	.2667E 00	.1161E-04	.3465E-05	.6312E-01	.3150E-05	.3931E-01
.6800E 01	.3200E 00	.1200E 00	.1103E-04	.3529E-05	.6347E-01	.1324E-05	.3961E-01
.6900E 01	.3320E 00	.1200E 00	.1027E-04	.3418E-05	.6382E-01	.1235E-05	.3974E-01
.7000E 01	.3440E 00	.1200E 00	.9609E-05	.3305E-05	.6416E-01	.1153E-05	.3986E-01
.7100E 01	.3560E 00	.1200E 00	.8968E-05	.3193E-05	.6448E-01	.1076E-05	.3997E-01
.7200E 01	.3680E 00	-.7599E-01	.8369E-05	.3080E-05	.6480E-01	-.6359E-06	.4007E-01
.7300E 01	.3604E 00	-.7600E-01	.7809E-05	.2814E-05	.6509E-01	-.5935E-06	.4001E-01
.7400E 01	.3528E 00	-.7600E-01	.7266E-05	.2570E-05	.6536E-01	-.5537E-06	.3996E-01
.7500E 01	.3452E 00	-.7600E-01	.6797E-05	.2346E-05	.6561E-01	-.5166E-06	.3990E-01
.7600E 01	.3376E 00	-.7600E-01	.6341E-05	.2141E-05	.6583E-01	-.4819E-06	.3985E-01
.7700E 01	.3300E 00	-.2600E-01	.5914E-05	.1952E-05	.6603E-01	-.1183E-06	.3981E-01
.7800E 01	.3280E 00	-.2000E-01	.5516E-05	.1809E-05	.6622E-01	-.1103E-06	.3980E-01
.7900E 01	.3260E 00	-.2000E-01	.5144E-05	.1677E-05	.6640E-01	-.1029E-06	.3978E-01
.8000E 01	.3240E 00	-.1333E-01	.4797E-05	.1554E-05	.6656E-01	-.6396E-07	.3977E-01
.8100E 01	.3227E 00	-.1333E-01	.4473E-05	.1443E-05	.6671E-01	-.5964E-07	.3977E-01
.8200E 01	.3213E 00	-.1333E-01	.4171E-05	.1340E-05	.6685E-01	-.5561E-07	.3976E-01
.8300E 01	.3200E 00	-.3143E-01	.3888E-05	.1244E-05	.6698E-01	-.1222E-06	.3976E-01
.8400E 01	.3169E 00	-.3143E-01	.3625E-05	.1149E-05	.6709E-01	-.1139E-06	.3975E-01
.8500E 01	.3137E 00	-.3143E-01	.3379E-05	.1060E-05	.6720E-01	-.1062E-06	.3973E-01
.8600E 01	.3106E 00	-.3143E-01	.3150E-05	.9782E-06	.6731E-01	-.9899E-07	.3972E-01
.8700E 01	.3074E 00	-.3143E-01	.2936E-05	.9026E-06	.6740E-01	-.9227E-07	.3971E-01
.8800E 01	.3043E 00	-.3143E-01	.2736E-05	.8326E-06	.6749E-01	-.8599E-07	.3971E-01
.8900E 01	.3011E 00	-.3143E-01	.2550E-05	.7679E-06	.6757E-01	-.8014E-07	.3970E-01
.9000E 01	.2980E 00	-.1500E-01	.2376E-05	.7081E-06	.6764E-01	-.3565E-07	.3969E-01
.9100E 01	.2965E 00	-.1500E-01	.2214E-05	.6565E-06	.6771E-01	-.3321E-07	.3969E-01
.9200E 01	.2950E 00	-.1500E-01	.2063E-05	.6086E-06	.6777E-01	-.3095E-07	.3968E-01
.9300E 01	.2935E 00	-.1500E-01	.1922E-05	.5642E-06	.6783E-01	-.2883E-07	.3968E-01
.9400E 01	.2920E 00	-.1500E-01	.1791E-05	.5229E-06	.6789E-01	-.2686E-07	.3968E-01
.9500E 01	.2905E 00	-.1500E-01	.1666E-05	.4847E-06	.6794E-01	-.2503E-07	.3967E-01
.9600E 01	.2890E 00	-.1500E-01	.1554E-05	.4491E-06	.6798E-01	-.2331E-07	.3967E-01
.9700E 01	.2875E 00	-.1500E-01	.1448E-05	.4162E-06	.6803E-01	-.2172E-07	.3967E-01
.9800E 01	.2860E 00	-.1500E-01	.1348E-05	.3857E-06	.6807E-01	-.2023E-07	.3967E-01
.9900E 01	.2845E 00	-.1500E-01	.1256E-05	.3573E-06	.6810E-01	-.1884E-07	.3967E-01
.1000E 02	.2830E 00	-.1000E-02	.1170E-05	.3310E-06	.6814E-01	-.1173E-08	.3966E-01
.1010E 02	.2829E 00	-.1000E-02	.1069E-05	.3082E-06	.6817E-01	-.1089E-08	.3966E-01
.1020E 02	.2828E 00	-.1000E-02	.1014E-05	.2869E-06	.6820E-01	-.1014E-08	.3966E-01
.1030E 02	.2827E 00	-.1000E-02	.9447E-06	.2671E-06	.6823E-01	-.9447E-09	.3966E-01
.1040E 02	.2826E 00	-.1000E-02	.8797E-06	.2486E-06	.6825E-01	-.8797E-09	.3966E-01
.1050E 02	.2825E 00	-.1000E-02	.8191E-06	.2314E-06	.6828E-01	-.8191E-09	.3966E-01
.1060E 02	.2824E 00	-.1000E-02	.7627E-06	.2154E-06	.6830E-01	-.7627E-09	.3966E-01
.1070E 02	.2823E 00	-.1000E-02	.7101E-06	.2005E-06	.6832E-01	-.7101E-09	.3966E-01
.1080E 02	.2822E 00	-.1000E-02	.6611E-06	.1866E-06	.6834E-01	-.6611E-09	.3966E-01
.1090E 02	.2821E 00	-.1000E-02	.6154E-06	.1736E-06	.6836E-01	-.6154E-09	.3966E-01
.1100E 02	.2820E 00	.8997E-02	.5724E-06	.1616E-06	.6837E-01	.5155E-08	.3966E-01
.1110E 02	.2829E 00	.9000E-02	.5333E-06	.1509E-06	.6839E-01	.4800E-08	.3966E-01
.1120E 02	.2838E 00	.9000E-02	.4965E-06	.1409E-06	.6840E-01	.4468E-08	.3966E-01

TM-232(N,FISSION)  
U-235 FISSION SPECTRUM

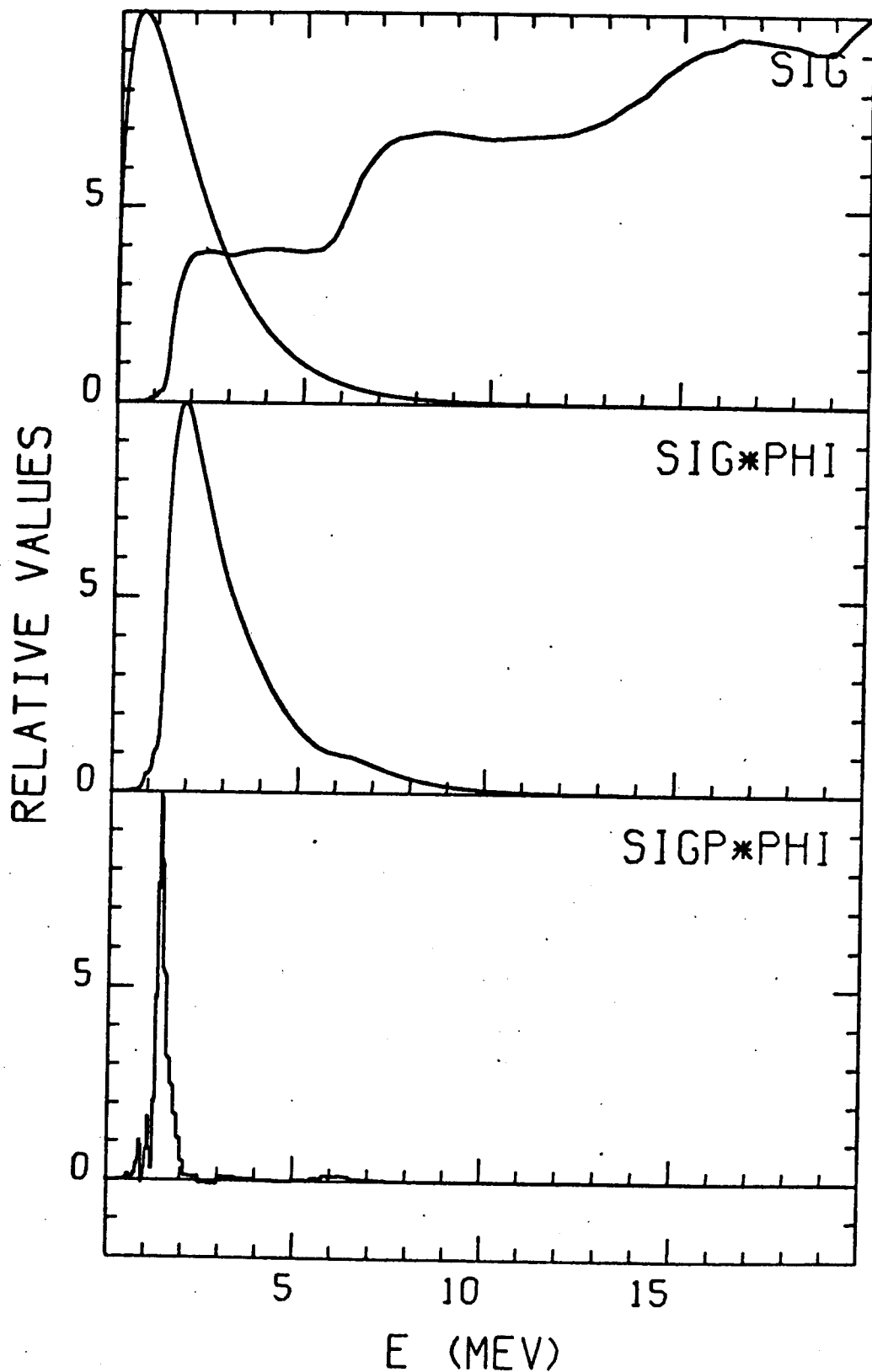
E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1130E 02	.2847E 00	.9000E-02	.4621E-06	.1316E-06	.6842E-01	.4159E-08	.3966E-01
.1140E 02	.2856E 00	.9000E-02	.4301E-06	.1228E-06	.6843E-01	.3871E-08	.3967E-01
.1150E 02	.2865E 00	.9000E-02	.4003E-06	.1147E-06	.6844E-01	.3603E-08	.3967E-01
.1160E 02	.2874E 00	.9000E-02	.3726E-06	.1071E-06	.6845E-01	.3353E-08	.3967E-01
.1170E 02	.2883E 00	.9000E-02	.3468E-06	.9997E-07	.6846E-01	.3121E-08	.3967E-01
.1180E 02	.2892E 00	.9000E-02	.3227E-06	.9332E-07	.6847E-01	.2904E-08	.3967E-01
.1190E 02	.2901E 00	.9000E-02	.3003E-06	.8712E-07	.6848E-01	.2703E-08	.3967E-01
.1200E 02	.2910E 00	.2899E-01	.2795E-06	.8132E-07	.6849E-01	.8102E-08	.3967E-01
.1210E 02	.2939E 00	.2900E-01	.2600E-06	.7643E-07	.6850E-01	.7541E-08	.3967E-01
.1220E 02	.2968E 00	.2900E-01	.2420E-06	.7182E-07	.6851E-01	.7017E-08	.3967E-01
.1230E 02	.2997E 00	.2900E-01	.2251E-06	.6748E-07	.6851E-01	.6529E-08	.3967E-01
.1240E 02	.3026E 00	.2900E-01	.2095E-06	.6339E-07	.6852E-01	.6075E-08	.3967E-01
.1250E 02	.3055E 00	.2900E-01	.1949E-06	.5955E-07	.6853E-01	.5652E-08	.3967E-01
.1260E 02	.3084E 00	.2900E-01	.1813E-06	.5593E-07	.6853E-01	.5259E-08	.3967E-01
.1270E 02	.3113E 00	.2900E-01	.1667E-06	.5252E-07	.6854E-01	.4893E-08	.3967E-01
.1280E 02	.3142E 00	.2900E-01	.1570E-06	.4932E-07	.6854E-01	.4552E-08	.3967E-01
.1290E 02	.3171E 00	.2900E-01	.1460E-06	.4630E-07	.6855E-01	.4235E-08	.3967E-01
.1300E 02	.3200E 00	.4000E-01	.1358E-06	.4347E-07	.6855E-01	.5433E-08	.3967E-01
.1310E 02	.3240E 00	.4000E-01	.1264E-06	.4094E-07	.6856E-01	.5054E-08	.3967E-01
.1320E 02	.3280E 00	.4000E-01	.1175E-06	.3855E-07	.6856E-01	.4702E-08	.3967E-01
.1330E 02	.3320E 00	.4000E-01	.1093E-06	.3630E-07	.6856E-01	.4373E-08	.3967E-01
.1340E 02	.3360E 00	.4000E-01	.1017E-06	.3417E-07	.6857E-01	.4068E-08	.3967E-01
.1350E 02	.3400E 00	.4000E-01	.9459E-07	.3216E-07	.6857E-01	.3784E-08	.3968E-01
.1360E 02	.3440E 00	.4000E-01	.8798E-07	.3027E-07	.6857E-01	.3519E-08	.3968E-01
.1370E 02	.3480E 00	.4000E-01	.8183E-07	.2848E-07	.6858E-01	.3273E-08	.3968E-01
.1380E 02	.3520E 00	.4000E-01	.7611E-07	.2679E-07	.6858E-01	.3044E-08	.3968E-01
.1390E 02	.3560E 00	.4000E-01	.7078E-07	.2520E-07	.6858E-01	.2831E-08	.3968E-01
.1400E 02	.3600E 00	.5499E-01	.6583E-07	.2370E-07	.6858E-01	.3620E-08	.3968E-01
.1410E 02	.3655E 00	.5500E-01	.6122E-07	.2238E-07	.6859E-01	.3367E-08	.3968E-01
.1420E 02	.3710E 00	.5500E-01	.5693E-07	.2112E-07	.6859E-01	.3131E-08	.3968E-01
.1430E 02	.3765E 00	.5500E-01	.5294E-07	.1993E-07	.6859E-01	.2912E-08	.3968E-01
.1440E 02	.3820E 00	.5500E-01	.4923E-07	.1881E-07	.6859E-01	.2708E-08	.3968E-01
.1450E 02	.3875E 00	.5500E-01	.4578E-07	.1774E-07	.6859E-01	.2518E-08	.3968E-01
.1460E 02	.3930E 00	.5500E-01	.4257E-07	.1673E-07	.6860E-01	.2341E-08	.3968E-01
.1470E 02	.3985E 00	.5500E-01	.3959E-07	.1578E-07	.6860E-01	.2177E-08	.3968E-01
.1480E 02	.4040E 00	.5500E-01	.3681E-07	.1487E-07	.6860E-01	.2024E-08	.3968E-01
.1490E 02	.4095E 00	.5500E-01	.3422E-07	.1402E-07	.6860E-01	.1882E-08	.3968E-01
.1500E 02	.4150E 00	.2342E-01	.3182E-07	.1321E-07	.6860E-01	.7454E-09	.3968E-01
.1510E 02	.4173E 00	.2341E-01	.2959E-07	.1235E-07	.6860E-01	.6925E-09	.3968E-01
.1520E 02	.4197E 00	.2341E-01	.2751E-07	.1154E-07	.6860E-01	.6439E-09	.3968E-01
.1530E 02	.4220E 00	.2341E-01	.2558E-07	.1079E-07	.6860E-01	.5986E-09	.3968E-01
.1540E 02	.4244E 00	.2341E-01	.2378E-07	.1009E-07	.6861E-01	.5565E-09	.3968E-01
.1550E 02	.4267E 00	.2341E-01	.2211E-07	.9433E-08	.6861E-01	.5174E-09	.3968E-01
.1560E 02	.4290E 00	.2341E-01	.2055E-07	.8817E-08	.6861E-01	.4810E-09	.3968E-01
.1570E 02	.4314E 00	.2341E-01	.1911E-07	.8242E-08	.6861E-01	.4472E-09	.3968E-01
.1580E 02	.4337E 00	.2341E-01	.1776E-07	.7703E-08	.6861E-01	.4157E-09	.3968E-01
.1590E 02	.4361E 00	.2341E-01	.1651E-07	.7200E-08	.6861E-01	.3864E-09	.3968E-01
.1600E 02	.4384E 00	.2341E-01	.1535E-07	.6729E-08	.6861E-01	.3592E-09	.3968E-01
.1610E 02	.4407E 00	.2341E-01	.1427E-07	.6288E-08	.6861E-01	.3339E-09	.3968E-01
.1620E 02	.4431E 00	.2341E-01	.1326E-07	.5876E-08	.6861E-01	.3104E-09	.3968E-01

TH-232(N,FISSION)  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1630E 02	.4454E 00	.2341E-01	.1233E-07	.5491E-08	.6861E-01	.2885E-09	.3966E-01
.1640E 02	.4478E 00	.2341E-01	.1146E-07	.5131E-08	.6861E-01	.2682E-09	.3966E-01
.1650E 02	.4501E 00	.2341E-01	.1065E-07	.4794E-08	.6861E-01	.2493E-09	.3966E-01
.1660E 02	.4524E 00	.2341E-01	.9900E-08	.4479E-08	.6861E-01	.2317E-09	.3966E-01
.1670E 02	.4548E 00	.2341E-01	.9202E-08	.4185E-08	.6861E-01	.2154E-09	.3966E-01
.1680E 02	.4571E 00	.2341E-01	.8553E-08	.3910E-08	.6862E-01	.2002E-09	.3966E-01
.1690E 02	.4595E 00	.2341E-01	.7949E-08	.3652E-08	.6862E-01	.1861E-09	.3966E-01
.1700E 02	.4618E 00	.2341E-01	.7355E-08	.3412E-08	.6862E-01	.1729E-09	.3966E-01
.1710E 02	.4642E 00	.2341E-01	.6867E-08	.3187E-08	.6862E-01	.1607E-09	.3966E-01
.1720E 02	.4665E 00	.2341E-01	.6382E-08	.2977E-08	.6862E-01	.1494E-09	.3966E-01
.1730E 02	.4688E 00	.2341E-01	.5931E-08	.2781E-08	.6862E-01	.1388E-09	.3966E-01
.1740E 02	.4712E 00	.2341E-01	.5512E-08	.2597E-08	.6862E-01	.1290E-09	.3966E-01
.1750E 02	.4735E 00	.2341E-01	.5123E-08	.2426E-08	.6862E-01	.1199E-09	.3966E-01
.1760E 02	.4759E 00	.2341E-01	.4761E-08	.2265E-08	.6862E-01	.1114E-09	.3966E-01
.1770E 02	.4782E 00	.2341E-01	.4424E-08	.2116E-08	.6862E-01	.1036E-09	.3966E-01
.1780E 02	.4805E 00	.2341E-01	.4111E-08	.1976E-08	.6862E-01	.9623E-10	.3966E-01
.1790E 02	.4829E 00	.2341E-01	.3821E-08	.1845E-08	.6862E-01	.8942E-10	.3966E-01
.1800E 02	.4852E 00	.2341E-01	.3550E-08	.1723E-08	.6862E-01	.8310E-10	.3966E-01
.1810E 02	.4876E 00	.2341E-01	.3299E-08	.1609E-08	.6862E-01	.7722E-10	.3966E-01
.1820E 02	.4899E 00	.2341E-01	.3060E-08	.1502E-08	.6862E-01	.7176E-10	.3966E-01
.1830E 02	.4922E 00	.2341E-01	.2849E-08	.1402E-08	.6862E-01	.6668E-10	.3966E-01
.1840E 02	.4946E 00	.2341E-01	.2647E-08	.1309E-08	.6862E-01	.6196E-10	.3966E-01
.1850E 02	.4969E 00	.2341E-01	.2460E-08	.1222E-08	.6862E-01	.5757E-10	.3966E-01
.1860E 02	.4993E 00	.2341E-01	.2286E-08	.1141E-08	.6862E-01	.5349E-10	.3966E-01
.1870E 02	.5016E 00	.2341E-01	.2124E-08	.1065E-08	.6862E-01	.4971E-10	.3966E-01
.1880E 02	.5039E 00	.2341E-01	.1973E-08	.9944E-09	.6862E-01	.4618E-10	.3966E-01
.1890E 02	.5063E 00	.2341E-01	.1833E-08	.9282E-09	.6862E-01	.4291E-10	.3966E-01
.1900E 02	.5086E 00	.2341E-01	.1703E-08	.8664E-09	.6862E-01	.3987E-10	.3966E-01
.1910E 02	.5110E 00	.2341E-01	.1583E-08	.8087E-09	.6862E-01	.3705E-10	.3966E-01
.1920E 02	.5133E 00	.2341E-01	.1471E-08	.7548E-09	.6862E-01	.3442E-10	.3966E-01
.1930E 02	.5156E 00	.2341E-01	.1366E-08	.7045E-09	.6862E-01	.3198E-10	.3966E-01
.1940E 02	.5180E 00	.2341E-01	.1269E-08	.6575E-09	.6862E-01	.2971E-10	.3966E-01
.1950E 02	.5203E 00	.2341E-01	.1179E-08	.6136E-09	.6862E-01	.2760E-10	.3966E-01
.1960E 02	.5227E 00	.2341E-01	.1096E-08	.5727E-09	.6862E-01	.2564E-10	.3966E-01
.1970E 02	.5250E 00	.2341E-01	.1013E-08	.5344E-09	.6862E-01	.2383E-10	.3966E-01
.1980E 02	.5273E 00	.2341E-01	.9457E-09	.4987E-09	.6862E-01	.2213E-10	.3966E-01
.1990E 02	.5297E 00	.2341E-01	.8786E-09	.4654E-09	.6862E-01	.2056E-10	.3966E-01

SPECTRUM AVERAGE CROSS SECTION = .6862E-01

U-238 (N, FISSION)  
U-235 FISSION SPECTRUM



U-238(N,FISSION)  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1000E 00	.4000E-04	.1500E-03	.2197E-03	.8788E-08	.7222E-06	.3295E-07	-.3063E-06
.2000E 00	.5500E-04	.1500E-03	.2879E-03	.1584E-07	.1956E-05	.4319E-07	.3558E-05
.3000E 00	.7000E-04	.5200E-03	.3268E-03	.2287E-07	.3896E-05	.1699E-06	.8316E-05
.4000E 00	.1220E-03	.1120E-02	.3497E-03	.4266E-07	.7173E-05	.3916E-06	.2618E-04
.5000E 00	.2340E-03	.4427E-02	.3623E-03	.8477E-07	.1355E-04	.1604E-05	.6733E-04
.6000E 00	.1047E-02	.1926E-01	.3673E-03	.3852E-06	.3207E-04	.7062E-05	.3708E-03
.7000E 00	.1340E-02	.1290E-01	.3681E-03	.4933E-06	.7910E-04	.4749E-05	.4761E-03
.8000E 00	.3116E-02	.5510E-01	.3647E-03	.1136E-05	.1566E-03	.2009E-04	.1142E-02
.9000E 00	.1007E-01	.1356E 00	.3584E-03	.3610E-05	.3783E-03	.4861E-04	.3684E-02
.1000E 01	.1617E-01	.3898E-01	.3501E-03	.5661E-05	.9009E-03	.1365E-04	.5824E-02
.1100E 01	.2350E-01	.2278E 00	.3403E-03	.7997E-05	.1557E-02	.7753E-04	.8411E-02
.1200E 01	.4049E-01	.4216E-01	.3294E-03	.1334E-04	.2678E-02	.1389E-04	.1405E-01
.1300E 01	.5772E-01	.7113E 00	.3177E-03	.1834E-04	.4162E-02	.2260E-03	.1981E-01
.1400E 01	.1512E 00	.1546E 01	.3055E-03	.4621E-04	.7248E-02	.4724E-03	.4913E-01
.1500E 01	.2939E 00	.8641E 00	.2930E-03	.8611E-04	.1400E-01	.2591E-03	.9165E-01
.1600E 01	.3823E 00	.5465E 00	.2805E-03	.1072E-03	.2370E-01	.1533E-03	.1169E 00
.1700E 01	.4369E 00	.4453E 00	.2679E-03	.1171E-03	.3493E-01	.1193E-03	.1319E 00
.1800E 01	.4815E 00	.3223E 00	.2554E-03	.1230E-03	.4694E-01	.8232E-04	.1435E 00
.1900E 01	.5137E 00	.2139E 00	.2432E-03	.1249E-03	.5935E-01	.5203E-04	.1515E 00
.2000E 01	.5351E 00	.1011E 00	.2312E-03	.1237E-03	.7178E-01	.2339E-04	.1565E 00
.2100E 01	.5452E 00	.2401E-01	.2195E-03	.1197E-03	.8395E-01	.5273E-05	.1583E 00
.2200E 01	.5476E 00	.2401E-01	.2083E-03	.1140E-03	.9563E-01	.5001E-05	.1593E 00
.2300E 01	.5500E 00	.2401E-01	.1973E-03	.1085E-03	.1068E 00	.4738E-05	.1598E 00
.2400E 01	.5524E 00	.2401E-01	.1668E-03	.1032E-03	.1173E 00	.4485E-05	.1602E 00
.2500E 01	.5548E 00	-.2001E-01	.1767E-03	.9802E-04	.1274E 00	-.3535E-05	.1607E 00
.2600E 01	.5528E 00	-.2001E-01	.1670E-03	.9229E-04	.1369E 00	-.3341E-05	.1603E 00
.2700E 01	.5508E 00	-.2001E-01	.1577E-03	.8684E-04	.1459E 00	-.3155E-05	.1600E 00
.2800E 01	.5482E 00	-.3122E-01	.1488E-03	.8157E-04	.1543E 00	-.4645E-05	.1596E 00
.2900E 01	.5451E 00	-.3122E-01	.1403E-03	.7649E-04	.1622E 00	-.4380E-05	.1592E 00
.3000E 01	.5420E 00	-.7351E-02	.1323E-03	.7168E-04	.1696E 00	-.9722E-06	.1587E 00
.3100E 01	.5413E 00	.3392E-01	.1246E-03	.6743E-04	.1765E 00	.4226E-05	.1587E 00
.3200E 01	.5446E 00	.3393E-01	.1173E-03	.6389E-04	.1831E 00	.3979E-05	.1591E 00
.3300E 01	.5460E 00	.3393E-01	.1104E-03	.6049E-04	.1893E 00	.3745E-05	.1594E 00
.3400E 01	.5514E 00	.3392E-01	.1038E-03	.5725E-04	.1952E 00	.3522E-05	.1598E 00
.3500E 01	.5548E 00	.2195E-01	.9762E-04	.5416E-04	.2008E 00	.2142E-05	.1602E 00
.3600E 01	.5570E 00	.2195E-01	.9175E-04	.5111E-04	.2060E 00	.2013E-05	.1604E 00
.3700E 01	.5592E 00	.2195E-01	.8619E-04	.4820E-04	.2110E 00	.1892E-05	.1606E 00
.3800E 01	.5614E 00	.2195E-01	.8095E-04	.4544E-04	.2157E 00	.1776E-05	.1607E 00
.3900E 01	.5636E 00	.2195E-01	.7599E-04	.4283E-04	.2201E 00	.1668E-05	.1609E 00
.4000E 01	.5658E 00	-.4879E-02	.7132E-04	.4035E-04	.2242E 00	-.3480E-06	.1611E 00
.4100E 01	.5653E 00	-.4880E-02	.6691E-04	.3783E-04	.2281E 00	-.3265E-06	.1610E 00
.4200E 01	.5648E 00	-.4880E-02	.6276E-04	.3545E-04	.2318E 00	-.3063E-06	.1610E 00
.4300E 01	.5643E 00	-.4880E-02	.5884E-04	.3321E-04	.2352E 00	-.2872E-06	.1610E 00
.4400E 01	.5638E 00	-.4880E-02	.5516E-04	.3110E-04	.2384E 00	-.2692E-06	.1609E 00
.4500E 01	.5634E 00	-.1740E-01	.5169E-04	.2912E-04	.2415E 00	-.8996E-06	.1609E 00
.4600E 01	.5616E 00	-.1740E-01	.4843E-04	.2720E-04	.2443E 00	-.8429E-06	.1608E 00
.4700E 01	.5599E 00	-.1740E-01	.4537E-04	.2540E-04	.2469E 00	-.7896E-06	.1608E 00
.4800E 01	.5581E 00	-.1740E-01	.4249E-04	.2371E-04	.2494E 00	-.7394E-06	.1607E 00
.4900E 01	.5564E 00	-.1740E-01	.3978E-04	.2213E-04	.2516E 00	-.6923E-06	.1606E 00
.5000E 01	.5547E 00	.2446E-01	.3724E-04	.2065E-04	.2538E 00	.9108E-06	.1605E 00

U-238(N,FISSION)  
U-235 FISSI2N SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIGP*PHI	G
.5100E 01	.5571E 00	.2446E-01	.3485E-04	.1942E-04	.2558E 00	.8524E-06	.1606E 00
.5200E 01	.5595E 00	.1530E-01	.3261E-04	.1825E-04	.2577E 00	.4989E-06	.1607E 00
.5300E 01	.5611E 00	.1530E-01	.3051E-04	.1712E-04	.2594E 00	.4668E-06	.1608E 00
.5400E 01	.5626E 00	.2876E-01	.2854E-04	.1606E-04	.2611E 00	.8264E-06	.1608E 00
.5500E 01	.5655E 00	.1266E 00	.2669E-04	.1509E-04	.2626E 00	.3385E-05	.1609E 00
.5600E 01	.5782E 00	.1269E 00	.2496E-04	.1443E-04	.2641E 00	.3166E-05	.1612E 00
.5700E 01	.5909E 00	.1269E 00	.2333E-04	.1379E-04	.2655E 00	.2960E-05	.1615E 00
.5800E 01	.6036E 00	.2882E 00	.2181E-04	.1316E-04	.2669E 00	.6285E-05	.1618E 00
.5900E 01	.6324E 00	.2882E 00	.2038E-04	.1289E-04	.2682E 00	.5875E-05	.1624E 00
.6000E 01	.6612E 00	.3099E 00	.1905E-04	.1260E-04	.2695E 00	.5904E-05	.1630E 00
.6100E 01	.6922E 00	.3099E 00	.1780E-04	.1232E-04	.2707E 00	.5516E-05	.1636E 00
.6200E 01	.7232E 00	.3733E 00	.1663E-04	.1203E-04	.2719E 00	.6207E-05	.1641E 00
.6300E 01	.7605E 00	.3733E 00	.1553E-04	.1181E-04	.2731E 00	.5799E-05	.1647E 00
.6400E 01	.7978E 00	.3733E 00	.1451E-04	.1158E-04	.2743E 00	.5416E-05	.1652E 00
.6500E 01	.8352E 00	.2061E 00	.1355E-04	.1132E-04	.2754E 00	.2793E-05	.1658E 00
.6600E 01	.8736E 00	.2061E 00	.1255E-04	.1083E-04	.2765E 00	.2608E-05	.1660E 00
.6700E 01	.9124E 00	.2061E 00	.1181E-04	.1035E-04	.2776E 00	.2435E-05	.1663E 00
.6800E 01	.9570E 00	.1650E 00	.1103E-04	.9893E-05	.2786E 00	.1820E-05	.1665E 00
.6900E 01	.9135E 00	.1650E 00	.1029E-04	.9404E-05	.2796E 00	.1699E-05	.1667E 00
.7000E 01	.9300E 00	.1350E 00	.9600E-05	.8936E-05	.2805E 00	.1297E-05	.1669E 00
.7100E 01	.9435E 00	.1350E 00	.8960E-05	.8461E-05	.2814E 00	.1211E-05	.1670E 00
.7200E 01	.9570E 00	.7000E-01	.8369E-05	.8009E-05	.2822E 00	.5858E-06	.1671E 00
.7300E 01	.9640E 00	.7000E-01	.7809E-05	.7528E-05	.2830E 00	.5466E-06	.1672E 00
.7400E 01	.9710E 00	.7000E-01	.7286E-05	.7074E-05	.2837E 00	.5100E-06	.1672E 00
.7500E 01	.9780E 00	.2400E-01	.6797E-05	.6647E-05	.2844E 00	.1632E-06	.1673E 00
.7600E 01	.9804E 00	.2400E-01	.6341E-05	.6216E-05	.2850E 00	.1522E-06	.1673E 00
.7700E 01	.9828E 00	.2400E-01	.5914E-05	.5812E-05	.2856E 00	.1419E-06	.1673E 00
.7800E 01	.9852E 00	.2400E-01	.5516E-05	.5434E-05	.2862E 00	.1324E-06	.1673E 00
.7900E 01	.9876E 00	.2400E-01	.5144E-05	.5081E-05	.2867E 00	.1235E-06	.1673E 00
.8000E 01	.9900E 00	.2400E-01	.4797E-05	.4749E-05	.2872E 00	.1151E-06	.1673E 00
.8100E 01	.9924E 00	.2400E-01	.4473E-05	.4439E-05	.2876E 00	.1074E-06	.1673E 00
.8200E 01	.9948E 00	.2400E-01	.4171E-05	.4149E-05	.2881E 00	.1001E-06	.1674E 00
.8300E 01	.9968E 00	.1600E-01	.3898E-05	.3876E-05	.2885E 00	.6222E-07	.1674E 00
.8400E 01	.9984E 00	.1600E-01	.3625E-05	.3619E-05	.2889E 00	.5800E-07	.1674E 00
.8500E 01	.1000E 01	-.1200E-01	.3379E-05	.3379E-05	.2892E 00	-.4054E-07	.1674E 00
.8600E 01	.9988E 00	-.1200E-01	.3150E-05	.3146E-05	.2895E 00	-.3780E-07	.1674E 00
.8700E 01	.9976E 00	-.1200E-01	.2936E-05	.2929E-05	.2898E 00	-.3523E-07	.1674E 00
.8800E 01	.9960E 00	-.2000E-01	.2736E-05	.2725E-05	.2901E 00	-.5472E-07	.1674E 00
.8900E 01	.9940E 00	-.2000E-01	.2550E-05	.2535E-05	.2904E 00	-.5100E-07	.1674E 00
.9000E 01	.9920E 00	-.2000E-01	.2376E-05	.2357E-05	.2906E 00	-.4752E-07	.1674E 00
.9100E 01	.9900E 00	-.2000E-01	.2214E-05	.2192E-05	.2908E 00	-.4428E-07	.1673E 00
.9200E 01	.9880E 00	-.2000E-01	.2063E-05	.2038E-05	.2911E 00	-.4126E-07	.1673E 00
.9300E 01	.9860E 00	-.2000E-01	.1922E-05	.1895E-05	.2913E 00	-.3844E-07	.1673E 00
.9400E 01	.9840E 00	-.2000E-01	.1791E-05	.1762E-05	.2914E 00	-.3582E-07	.1673E 00
.9500E 01	.9820E 00	-.2000E-01	.1666E-05	.1638E-05	.2916E 00	-.3337E-07	.1673E 00
.9600E 01	.9800E 00	-.2000E-01	.1554E-05	.1523E-05	.2918E 00	-.3108E-07	.1673E 00
.9700E 01	.9780E 00	-.2000E-01	.1446E-05	.1416E-05	.2919E 00	-.2895E-07	.1673E 00
.9800E 01	.9764E 00	-.1200E-01	.1343E-05	.1317E-05	.2920E 00	-.1618E-07	.1673E 00
.9900E 01	.9752E 00	-.1200E-01	.1256E-05	.1225E-05	.2922E 00	-.1507E-07	.1673E 00
.1000E 02	.9740E 00	.7996E-02	.1170E-05	.1139E-05	.2923E 00	.9353E-08	.1673E 00

U-238(N,FISSION)  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1010E 02	.9748E 00	.8000E-02	.1057E-05	.1062E-05	.2924E 00	.8715E-08	.1673E 00
.1020E 02	.9756E 00	.8000E-02	.1014E-05	.9897E-06	.2925E 00	.8116E-08	.1673E 00
.1030E 02	.9764E 00	.8000E-02	.9447E-06	.9224E-06	.2926E 00	.7558E-08	.1673E 00
.1040E 02	.9772E 00	.8000E-02	.8797E-06	.8596E-06	.2927E 00	.7038E-08	.1673E 00
.1050E 02	.9780E 00	.1000E-01	.8191E-06	.8011E-06	.2928E 00	.6191E-08	.1673E 00
.1060E 02	.9790E 00	.1000E-01	.7627E-06	.7466E-06	.2929E 00	.7627E-08	.1673E 00
.1070E 02	.9800E 00	.1000E-01	.7101E-06	.6959E-06	.2929E 00	.7101E-08	.1673E 00
.1080E 02	.9810E 00	.1000E-01	.6611E-06	.6495E-06	.2930E 00	.6611E-08	.1673E 00
.1090E 02	.9820E 00	.1000E-01	.6154E-06	.6044E-06	.2931E 00	.6154E-08	.1673E 00
.1100E 02	.9830E 00	.8001E-02	.5729E-06	.5632E-06	.2931E 00	.4584E-08	.1673E 00
.1110E 02	.9838E 00	.8000E-02	.5333E-06	.5247E-06	.2932E 00	.4267E-08	.1673E 00
.1120E 02	.9846E 00	.8000E-02	.4965E-06	.4888E-06	.2932E 00	.3972E-08	.1673E 00
.1130E 02	.9854E 00	.8000E-02	.4621E-06	.4554E-06	.2933E 00	.3697E-08	.1673E 00
.1140E 02	.9862E 00	.8000E-02	.4301E-06	.4242E-06	.2933E 00	.3441E-08	.1673E 00
.1150E 02	.9870E 00	.1600E-01	.4003E-06	.3951E-06	.2933E 00	.6404E-08	.1673E 00
.1160E 02	.9886E 00	.1600E-01	.3726E-06	.3683E-06	.2934E 00	.5961E-08	.1673E 00
.1170E 02	.9902E 00	.1600E-01	.3465E-06	.3434E-06	.2934E 00	.5548E-08	.1673E 00
.1180E 02	.9918E 00	.1600E-01	.3227E-06	.3201E-06	.2935E 00	.5163E-08	.1673E 00
.1190E 02	.9934E 00	.1600E-01	.3003E-06	.2983E-06	.2935E 00	.4605E-08	.1673E 00
.1200E 02	.9950E 00	.4799E-01	.2795E-06	.2781E-06	.2935E 00	.1341E-07	.1673E 00
.1210E 02	.9998E 00	.4800E-01	.2600E-06	.2600E-06	.2935E 00	.1248E-07	.1673E 00
.1220E 02	.1005E 01	.4800E-01	.2420E-06	.2431E-06	.2936E 00	.1161E-07	.1673E 00
.1230E 02	.1009E 01	.4800E-01	.2251E-06	.2273E-06	.2936E 00	.1081E-07	.1673E 00
.1240E 02	.1014E 01	.4300E-01	.2095E-06	.2125E-06	.2936E 00	.1006E-07	.1673E 00
.1250E 02	.1019E 01	.5800E-01	.1949E-06	.1986E-06	.2936E 00	.1130E-07	.1673E 00
.1260E 02	.1025E 01	.5800E-01	.1815E-06	.1858E-06	.2937E 00	.1052E-07	.1673E 00
.1270E 02	.1031E 01	.5800E-01	.1687E-06	.1739E-06	.2937E 00	.9785E-08	.1673E 00
.1280E 02	.1036E 01	.5800E-01	.1570E-06	.1627E-06	.2937E 00	.9104E-08	.1673E 00
.1290E 02	.1042E 01	.5800E-01	.1460E-06	.1522E-06	.2937E 00	.8469E-08	.1673E 00
.1300E 02	.1048E 01	.9998E-01	.1358E-06	.1424E-06	.2937E 00	.1358E-07	.1673E 00
.1310E 02	.1058E 01	.1000E 00	.1264E-06	.1337E-06	.2937E 00	.1264E-07	.1673E 00
.1320E 02	.1068E 01	.1000E 00	.1175E-06	.1255E-06	.2937E 00	.1175E-07	.1673E 00
.1330E 02	.1078E 01	.1000E 00	.1093E-06	.1179E-06	.2938E 00	.1093E-07	.1673E 00
.1340E 02	.1088E 01	.1000E 00	.1017E-06	.1106E-06	.2938E 00	.1017E-07	.1673E 00
.1350E 02	.1098E 01	.8401E-01	.9459E-07	.1039E-06	.2938E 00	.7947E-08	.1674E 00
.1360E 02	.1106E 01	.8400E-01	.8795E-07	.9735E-07	.2938E 00	.7391E-08	.1674E 00
.1370E 02	.1115E 01	.8400E-01	.8183E-07	.9123E-07	.2938E 00	.6874E-08	.1674E 00
.1380E 02	.1123E 01	.8400E-01	.7611E-07	.8549E-07	.2938E 00	.6393E-08	.1674E 00
.1390E 02	.1132E 01	.8400E-01	.7078E-07	.8010E-07	.2939E 00	.5946E-08	.1674E 00
.1400E 02	.1140E 01	.1400E 00	.6553E-07	.7505E-07	.2938E 00	.9214E-08	.1674E 00
.1410E 02	.1154E 01	.1400E 00	.6122E-07	.7065E-07	.2938E 00	.8571E-08	.1674E 00
.1420E 02	.1168E 01	.1400E 00	.5693E-07	.6650E-07	.2938E 00	.7971E-08	.1674E 00
.1430E 02	.1182E 01	.1400E 00	.5294E-07	.6258E-07	.2938E 00	.7412E-08	.1674E 00
.1440E 02	.1196E 01	.1400E 00	.4925E-07	.5888E-07	.2939E 00	.6893E-08	.1674E 00
.1450E 02	.1210E 01	.9992E-01	.4578E-07	.5540E-07	.2939E 00	.4575E-08	.1674E 00
.1460E 02	.1220E 01	.9990E-01	.4257E-07	.5194E-07	.2939E 00	.4253E-08	.1674E 00
.1470E 02	.1230E 01	.9990E-01	.3959E-07	.4869E-07	.2939E 00	.3955E-08	.1674E 00
.1480E 02	.1240E 01	.9990E-01	.3631E-07	.4564E-07	.2939E 00	.3677E-08	.1674E 00
.1490E 02	.1250E 01	.9990E-01	.3422E-07	.4278E-07	.2939E 00	.3419E-08	.1674E 00
.1500E 02	.1260E 01	.7451E-01	.3182E-07	.4009E-07	.2939E 00	.2498E-08	.1674E 00

U-238(N,FISSION)  
U-235 FISSION SPECTRUM

E	SIG	SIGP	PHI	SIG*PHI	F	SIG*PHI	G
.1510E 02	.1268E 01	.7850E-01	.2959E-07	.3751E-07	.2939E 00	.2323E-08	.1674E 00
.1520E 02	.1276E 01	.7850E-01	.2751E-07	.3509E-07	.2939E 00	.2159E-08	.1674E 00
.1530E 02	.1283E 01	.7850E-01	.2556E-07	.3283E-07	.2939E 00	.2008E-08	.1674E 00
.1540E 02	.1291E 01	.7850E-01	.2378E-07	.3071E-07	.2939E 00	.1867E-08	.1674E 00
.1550E 02	.1299E 01	.3303E-01	.2211E-07	.2872E-07	.2939E 00	.17301E-09	.1674E 00
.1560E 02	.1302E 01	.3300E-01	.2055E-07	.2677E-07	.2939E 00	.16782E-09	.1674E 00
.1570E 02	.1306E 01	.3300E-01	.1911E-07	.2495E-07	.2939E 00	.16305E-09	.1674E 00
.1580E 02	.1309E 01	.3300E-01	.1776E-07	.2325E-07	.2939E 00	.15861E-09	.1674E 00
.1590E 02	.1312E 01	.3300E-01	.1651E-07	.2167E-07	.2939E 00	.15449E-09	.1674E 00
.1600E 02	.1316E 01	.6722E-01	.1535E-07	.2019E-07	.2939E 00	.1032E-08	.1674E 00
.1610E 02	.1322E 01	.6724E-01	.1427E-07	.1887E-07	.2939E 00	.9593E-09	.1674E 00
.1620E 02	.1329E 01	.6724E-01	.1326E-07	.1763E-07	.2939E 00	.8918E-09	.1674E 00
.1630E 02	.1336E 01	.6724E-01	.1236E-07	.1647E-07	.2939E 00	.8289E-09	.1674E 00
.1640E 02	.1343E 01	.6724E-01	.1146E-07	.1538E-07	.2939E 00	.7705E-09	.1674E 00
.1650E 02	.1349E 01	-.1103E-01	.1065E-07	.1437E-07	.2939E 00	-.1175E-09	.1674E 00
.1660E 02	.1348E 01	-.1108E-01	.9900E-08	.1335E-07	.2939E 00	-.1097E-09	.1674E 00
.1670E 02	.1347E 01	-.1108E-01	.9202E-08	.1240E-07	.2939E 00	-.1020E-09	.1674E 00
.1680E 02	.1346E 01	-.1108E-01	.8553E-08	.1151E-07	.2939E 00	-.9476E-10	.1674E 00
.1690E 02	.1345E 01	-.1108E-01	.7949E-08	.1069E-07	.2939E 00	-.8808E-10	.1674E 00
.1700E 02	.1344E 01	-.2155E-01	.7388E-08	.9928E-08	.2939E 00	-.1592E-09	.1674E 00
.1710E 02	.1342E 01	-.2156E-01	.6867E-08	.9213E-08	.2939E 00	-.1480E-09	.1674E 00
.1720E 02	.1339E 01	-.2156E-01	.6332E-08	.8548E-08	.2939E 00	-.1376E-09	.1674E 00
.1730E 02	.1337E 01	-.2156E-01	.5931E-08	.7932E-08	.2939E 00	-.1279E-09	.1674E 00
.1740E 02	.1335E 01	-.2156E-01	.5512E-08	.7360E-08	.2939E 00	-.1188E-09	.1674E 00
.1750E 02	.1333E 01	-.1850E-01	.5123E-08	.6829E-08	.2939E 00	-.9478E-10	.1674E 00
.1760E 02	.1331E 01	-.1350E-01	.4761E-08	.6337E-08	.2939E 00	-.8807E-10	.1674E 00
.1770E 02	.1329E 01	-.1350E-01	.4424E-08	.5881E-08	.2939E 00	-.8185E-10	.1674E 00
.1780E 02	.1327E 01	-.1850E-01	.4111E-08	.5458E-08	.2939E 00	-.7606E-10	.1674E 00
.1790E 02	.1326E 01	-.1850E-01	.3821E-08	.5065E-08	.2939E 00	-.7068E-10	.1674E 00
.1800E 02	.1324E 01	-.4748E-01	.3550E-08	.4700E-08	.2939E 00	-.1686E-09	.1674E 00
.1810E 02	.1319E 01	-.4750E-01	.3299E-08	.4352E-08	.2939E 00	-.1567E-09	.1674E 00
.1820E 02	.1314E 01	-.4750E-01	.3066E-08	.4029E-08	.2939E 00	-.1456E-09	.1674E 00
.1830E 02	.1310E 01	-.4750E-01	.2849E-08	.3730E-08	.2939E 00	-.1353E-09	.1674E 00
.1840E 02	.1305E 01	-.4750E-01	.2647E-08	.3454E-08	.2939E 00	-.1257E-09	.1674E 00
.1850E 02	.1300E 01	-.4434E-02	.2460E-08	.3198E-08	.2939E 00	-.1091E-10	.1674E 00
.1860E 02	.1300E 01	-.4400E-02	.2256E-08	.2970E-08	.2939E 00	-.1006E-10	.1674E 00
.1870E 02	.1299E 01	-.4400E-02	.2124E-08	.2759E-08	.2939E 00	-.9344E-11	.1674E 00
.1880E 02	.1299E 01	-.4400E-02	.1973E-08	.2563E-08	.2939E 00	-.8682E-11	.1674E 00
.1890E 02	.1298E 01	-.4400E-02	.1833E-08	.2380E-08	.2939E 00	-.8067E-11	.1674E 00
.1900E 02	.1298E 01	.1539E 00	.1703E-08	.2211E-08	.2939E 00	.2622E-09	.1674E 00
.1910E 02	.1313E 01	.1541E 00	.1583E-08	.2078E-08	.2939E 00	.2439E-09	.1674E 00
.1920E 02	.1329E 01	.1541E 00	.1471E-08	.1954E-08	.2939E 00	.2266E-09	.1674E 00
.1930E 02	.1344E 01	.1541E 00	.1366E-08	.1836E-08	.2939E 00	.2105E-09	.1674E 00
.1940E 02	.1359E 01	.1541E 00	.1269E-08	.1726E-08	.2939E 00	.1956E-09	.1674E 00
.1950E 02	.1375E 01	.1203E 00	.1179E-08	.1621E-08	.2939E 00	.1419E-09	.1674E 00
.1960E 02	.1387E 01	.1203E 00	.1096E-08	.1520E-08	.2939E 00	.1318E-09	.1674E 00
.1970E 02	.1399E 01	.1203E 00	.1018E-08	.1424E-08	.2939E 00	.1225E-09	.1674E 00
.1980E 02	.1411E 01	.1203E 00	.9457E-09	.1334E-08	.2939E 00	.1138E-09	.1674E 00
.1990E 02	.1423E 01	.1203E 00	.8786E-09	.1250E-08	.2939E 00	.1057E-09	.1674E 00

SPECTRUM AVERAGE CROSS SECTION = .2939E 00



Report; ANL/NDM-30

Title: "Analysis of the Sensitivity of Spectrum-Average Cross Sections to Individual Characteristics of Differential Excitation Functions"

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Date of Report: March 1977

After this report was issued, two errors were found which should be corrected. Neither error is serious, but their presence might lead to some confusion.

Error 1:

Eq. (19) on page 13 should be replaced by

$$P_E = \frac{100}{\langle \sigma \rangle} \int_{E_1}^{E_2} \delta(\epsilon) \sigma'(\epsilon) \phi(\epsilon) d\epsilon$$

$$\approx 100 \bar{\delta} g(E_1, E_2) \quad (19)$$

The numeral one ( "1" ) appeared instead of an apostrophy ( "'" ) as the superscript following  $\sigma$ .

Error 2:

The paragraph starting in the middle of page 17 and continuing on to page 18 should be replaced by the following paragraph:

The  $^{46}\text{Ti}(n;p)^{46}\text{Sc}$  Reaction

Although the threshold for this reaction is 1.62 MeV, there are no monoenergetic data upon which to base an evaluation in the threshold region below about 3.7 MeV. In a recent evaluation, it was necessary to determine the shape of the differential cross section in this region by means of statistical model calculations [9]. How important is this energy region from the point of view of dosimetry applications? What priority should be given to performing differential measurements at these energies? The table of F values for the  $^{46}\text{Ti}(n;p)^{46}\text{Sc}$  reaction, which is contained in the Appendix, can be used to readily show that about 3% of the contribution to  $\langle \sigma \rangle$  for a  $^{235}\text{U}$  fission spectrum comes from energies below 3.7 MeV. The differential cross section estimated from model calculations could be in error by as much as 20% in this region which would lead to an error of less than 1% in computation of the  $^{235}\text{U}$  spectrum-average cross section. Consequently, there appears to be no pressing need for differential measurements in this region from the point of view of reactor dosimetry.